Minutes of the CWRU Institutional Biosafety Committee

IBC of record for the Louis Stokes Cleveland VAMC

Meeting Date: July 10, 2025

Members Present:

Charles Bark, Ronald Conlon, John Durfee, Craig Hodges (Chair), Kenneth Maytreyek, Monica Montano (Vice Chair), Sophia Onwuzulike, Alexander Rodriguez-Palacios, Ivy Samuels (VA rep), John Tilton, Koen vanBesien Pamela Vanderzalm, Andrew Young

Ex-Officio Members and Guests:

Colleen Karlo, Lorrie Rice

Meeting Convened: 3:03 PM via Zoom

The Chair reminded all members that any conflicts of interest related to a submission must be declared prior to the start of the discussion. Members with a conflict will be temporarily moved to the virtual waiting room for the duration of the relevant discussion.

Approval of Minutes

The IBC Chair asked members for discussion or additional changes to the draft minutes. There were minor changes recommended.

Motion: Approval of the June meeting minutes with the additional, specific changes.
For: 13 | Absent: 0 | Against: 0 | Conflict of Interest: 0 | Abstained: 0

Safety and Incident Reporting

There were no safety or incident reports for the committee.

Review of Prior Business

The biosafety officer confirmed that the facility deficiencies that were discussed at the June IBC meeting (signage, BSC certification) have all been addressed.

Review of New Protocols:

Investigator: Ana Hernandez Reynoso
Project Title: Assessing neural connectivity of the lower urinary tract after neurological injury
IBC Protocol: IBC-2025-553

Project Overview, Risk Assessment and Discussion:
The proposed research involves neural tracing studies in an animal model using a pseudorabies virus containing a reporter cassette. The virus is attenuated and is replication competent. Appropriate decontamination procedures are described for re-usable sharps. The handling of the virus will be done in a BSL2 room, and the committee has requested all handling and manipulations with the virus be conducted within a biosafety cabinet. Animals receiving virus will be housed in an ABSL2 housing room with appropriate caging and waste disposal procedures in place.

NIH Guidelines: III-D-1

Training and Facilities: The Investigator and laboratory staff have completed basic lab safety and biosafety training.

Vote: Approve at BSL2 with an update to the procedures.
For: 13 | Absent: 0| Against: 0 | Conflict of Interest: 0 | Abstained: 0

Investigator: Marissa Scavuzzo
Project Title: Viral-mediated knockouts in Enteric Glial Cells
IBC Protocol: IBC-2025-554

Project Overview, Risk Assessment and Discussion:
The research will use replication incompetent lentiviral vectors, generated using a multiplasmid system. The vectors will deliver CRISPR components for gene knockouts, shRNA for gene knock down, or reporter genes to human and murine cells in culture. Work practices, procedures, and facilities are consistent with BSL2 containment and appropriate for the planned research.

NIH Guidelines: III-D-1, III-D-3

Training and Facilities: The Investigator and laboratory staff have completed basic lab safety and biosafety training. There were no concerns regarding the facilities to accommodate the safety and containment requirements of the proposed experiments.

Vote: Approve at BSL2
For: 13 | Absent: 0 | Against: 0 | Conflict of Interest: 0 | Abstained: 0

Investigator: Tsan Xiao
Project Title: The role of inflammatory and signaling mediators in mucosal inflammation
IBC Protocol: IBC-2025-552

Project Overview, Risk Assessment and Discussion:
The research involves the use of replication incompetent lentiviral vectors for gene expression, expression of shRNA and delivery of Cas9 protein and gRNAs for investigation of genes involved in mucosal inflammation in human cells in culture. Work practices, procedures, and facilities are consistent with BSL2 containment and appropriate for the planned research.

NIH Guidelines: III-D-1, III-D-3

Training and Facilities: The Investigator and laboratory staff have completed basic lab safety and biosafety training. The biosafety officer noted that the BSC will need to be certified prior to use.

Vote: Approve at BSL2
For: 13 | Absent: 0 | Against: 0 | Conflict of Interest: 0 | Abstained: 0

Dr. Hodges is moved to the waiting room.

Review of Continuing Protocols:

Investigator: Craig Hodges
Project Title: Cystic Fibrosis correction through gene editing
IBC Protocol: IBC-2019-346

Project Overview, Risk Assessment and Discussion:
The research will investigate gene editing in an animal model using nanoparticles or AAV for delivery of the gene editing components. The protocol describes the appropriate disposal of sharps as well as the safe transport of recombinant materials. Work practices, procedures, and facilities are consistent with BSL1 containment, and safe sharps practices and PPE are described. The animals can be housed in a standard housing room.

NIH Guidelines: III-D-4

Training and Facilities: The Investigator and laboratory staff have completed basic lab safety and biosafety training. There were no concerns regarding the facilities to accommodate the safety and containment requirements of the proposed experiments.

Vote: Approve at BSL1
For: 12 | Absent: 0 | Against: 0 | Conflict of Interest: 1 | Abstained: 0

Dr. Hodges returns to the meeting. Dr. Tilton leaves the meeting.

Investigator: Alex Huang
Project Title: Determining the roles chemotactic and cell adhesion molecules in the ability of cancer cells to evade the immune system
IBC Protocol: #IBC-2013-149

Project Overview, Risk Assessment and Discussion:
An ecotropic replication incompetent retroviral vector will be used for experiments investigating genes with oncogenic potential, while replication incompetent lentiviral vectors (5 plasmid system) will be used for overexpression of human and rodent genes as well as reporter genes. The vectors will be used to transduce human and mouse cells in culture and the transduced cells will also be investigated in an animal model. CAR-T cells will be introduced into animal models. CRISPR experiments will involve the electroporation or transfection of gRNAs and Cas9 protein into cells in culture. Work practices, procedures, and facilities are consistent with BSL2 containment and appropriate for the planned research. Animals containing the recombinant materials can be housed in a standard housing room.

NIH Guidelines: III-D-1, III-D-3, III-D-4,III-E

Training and Facilities: There are some training deficiencies with a couple of individuals on the protocol. There were no concerns regarding the facilities to accommodate the safety and containment requirements of the proposed experiments.

Vote: Approve at BSL2 upon completion of training.
For: 12 | Absent: 1 |Against: 0 | Conflict of Interest: 0 | Abstained: 0

Investigator: John Letterio
Project Title: Immunotherapy and cell therapy for multiple myeloma.
IBC Protocol: #IBC-2019-335

Project Overview, Risk Assessment and Discussion:
The investigator is using a replication incompetent lentivirus (4 plasmid system) to introduce reporter genes, knockdown (shRNA) or overexpress human genes in human and murine cell lines. These cells may be introduced into animal models for investigation, and animals will be housed in a standard housing room. CRISPR experiments will also be done in cell culture using ribonucleoprotein and gRNAs introduced into the cells using electroporation. Work practices, procedures, and facilities are consistent with BSL2 containment and appropriate for the planned research.

NIH Guidelines: III-D-1, III-D-3 III-D-4, III-E

Training and Facilities: There are a few individuals who need to complete training. The biosafety officer also noted that the biosafety cabinet is due for recertification, and an updated sign designating the room as BSL2 is needed.

Vote: Approve at BSL2 upon completion of training.

For: 12 | Absent: 1 | Against: 0 | Conflict of Interest: 0 | Abstained: 0

Investigator: Rebecca Obeng
Project Title: Mouse tumor models, CD8 T cell differentiation, and the tumor microenvironment
IBC Protocol: #IBC-2022-452

Project Overview, Risk Assessment and Discussion:
Replication incompetent lentiviral vectors will be utilized in cell culture. Specifically, the vectors will contain inserts of gRNAs, shRNA or cDNA for murine genes or reporter genes and these will be used to infect murine tumor cell lines. These modified cell lines will be characterized and may also be investigated in an animal model. Mammalian expression plasmids will also be introduced into animal models with established tumors. Work practices, procedures, and facilities are consistent with BSL2 containment and appropriate for the planned research, and research animals can be housed in a standard housing room.

NIH guidelines: III-D-1, III-D-3, III-D-4, III-E

Training and Facilities: The Investigator and laboratory staff have completed basic lab safety and biosafety training. The biosafety officer noted that the lab entrance sign needs to indicate BSL2 containment.

Vote: Approve at BSL2

For: 12 | Absent: 1 | Against: 0 | Conflict of Interest: 0 | Abstained: 0

Investigator: William Schiemann
Project Title: Regulation of TGF-b signaling and tumorigenesis
IBC Protocol: #20100701

Project Overview, Risk Assessment and Discussion:
The experiments include the use of replication incompetent murine retroviral vectors or replication incompetent lentiviral vectors (produced with 3 or 4 plasmid system). The viral vectors will be used for delivery of cDNA for gene expression or shRNA for gene knockdown of human genes in murine and human cells in culture. Following transduction and biological assays, the cells will be introduced into animal models, and the animals are housed in a standard housing room. Work practices, procedures, and facilities are consistent with BSL2 containment and appropriate for the planned research. Personnel and funding have been updated with the continuing review.

NIH Guidelines: III-D-1, III-D-3, III-D-4

Training and Facilities: The Investigator and laboratory staff have completed basic lab safety and biosafety training. There were no concerns regarding the facilities to accommodate the safety and containment requirements of the proposed experiments.

Vote: Approve at BSL2
For: 12 | Absent: 1 | Against: 0 | Conflict of Interest: 0 | Abstained: 0

Dr. van Besien leaves the meeting.

Investigator: Koen van Besien
Project Title: A phase 1 single arm, open label study to evaluate the safety of UF-KURE-BCMA cells in patients with relapsed or refractory Multiple Myeloma
IBC Protocol: #IBC-2024-527

Project Overview, Risk Assessment and Discussion:
The clinical study involves the manufacturing of CAR-T cells in the Cell Therapy Lab using a lentiviral vector followed by administration to research participants. The cell therapy lab has well documented procedures in place and the work practices and facilities are consistent with BSL2 containment and appropriate for the planned research.

NIH guidelines: III-C, III-D-1

Training and Facilities: The Investigator and laboratory staff have completed training. There were no concerns regarding the facilities to accommodate the safety and containment requirements of the proposed experiments.

Vote: Approve at BSL2
For: 11 | Absent: 2 | Against: 0 | Conflict of Interest: 1 | Abstained: 0

Investigator: Anthony Wynshaw-Boris
Project Title: Mouse and Cellular Models of Human Neurogenetic Diseases
IBC Protocol: #IBC-2013-150

Project Overview, Risk Assessment and Discussion:
The research will use viral vector systems to transduce human and mouse cells to express or knockdown specific gene involved in development as well as reporter genes. A 4-plasmid replication incompetent lentivirus system or murine retrovirus system will be used. In addition, non-viral CRISPR/Cas will be used to introduce specific mutations in cell culture. Work practices, procedures, and facilities are consistent with BSL2 containment and appropriate for the planned research.

NIH Guidelines: III-D-1, III-D-3, III-E

Training and Facilities: The Investigator and laboratory staff have completed basic lab safety and biosafety training. There were no concerns regarding the facilities to accommodate the safety and containment requirements of the proposed experiments. The biosafety officer confirmed that the laboratory is equipped with biosafety cabinets, and the study application should be updated to reference a biosafety cabinet (and not a laminar flow hood).

Vote: Approve at BSL2 with minor updates to the study application.
For: 11 | Absent: 2 | Against: 0 | Conflict of Interest: 0 | Abstained: 0

Amendments:

Investigator: Xiongwei Zhu
Project Title: Mitochondrial dysfunction in neurodegenerative diseases
IBC Protocol: #IBC-2017-271

Project Overview, Risk Assessment and Discussion:
AAV and lentiviral vectors are used to overexpress or knockdown genes in animal models. After administration of viruses animals will be housed at ABSL2 for 7 days before moving to a standard housing room. The

amendment updates personnel and adds genes to be investigated using the viral vectors. Work practices, procedures, and facilities are consistent with BSL2 containment and appropriate for the planned research.

NIH Guidelines: III-D-1,III-D-3, III-D-4, III-E

Training and Facilities: One new researcher needs to complete biosafety training. There were no concerns regarding the facilities to accommodate the safety and containment requirements of the proposed experiments.

Vote: Approve at BSL2 upon completion of training.
For: 11 | Absent: 2 | Against: 0 | Conflict of Interest: 0 | Abstained: 0

Notice of Administrative Amendments

IBC #	PI	Title	Amendment
2023-474	Konczal	A Phase 1/Phase 2, open-label, dose-escalation, and dose expansion study to evaluate the safety, tolerability, and efficacy of SAR444836, an adeno-associated viral vector-mediated gene transfer of human phenylalanine hydroxylase, in adult participants with phenylketonuria	Updated clinical protocol
2023-502	Taylor	recombinant DNA used for expression of proteins in different cell lines, including bacteria, insect and human cells	Addition of personnel

Notice of Terminated Protocols

IBC #	PI	Title
2021-433	Konczal	A Phase 3, Randomized, Double-Blind, Placebo-Controlled Study of Adeno-Associated Virus Serotype 8 (AAV8)-Mediated Gene Transfer of Human Ornithine Transcarbamylase (OTC) in Patients with Late-Onset OTC Deficiency
2022-453	Dalal	A Phase 1/2 Study to Evaluate the Safety and Efficacy of a Single Dose of Autologous Clustered Regularly Interspaced Short Palindromic Repeats Gene-edited CD34+ Human Hematopoietic Stem and Progenitor Cells (EDIT-301) in Subjects with Severe Sickle Cell Disease
2020-387	Tomlinson	Phase I Clinical Trial of Human AntiCD19 Chimeric Antigen Receptor T Cells for Treatment of Relapsed or Refractory Lymphoid Malignancies (Non Hodgkin Lymphoma, Acute Lymphoblastic Leukemia, Chronic Lymphocytic Leukemia)
2019-351	Wang	Generating Erbb3 oncogenic mutation knockin cell lines

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Other Business - none

Next Meeting: August 14, 2025

Meeting Adjourned: 4:05 PM.