Minutes
Thursday, June 5th, 2025; 1:00PM
Teleconference

Present	Present	Excused
C. Aston	S. Morse (Chair)	L. Butaud-Rebbaa
H. Blumm	M. Quick	A. Donatich
C. Cameron	E. Peterson	A. Losonczy
K. Crowley	V. Racaniello	T. McConville
S. Hughes	E. Riber (Coordinator)	J.J Miranda
S. Joussef Pina	C. Pitoscia	P. Muranski
L. Kam	M. Underwood	D. Ng
B. Karolewski	Q. Wang	A. Romanov
J. Kaushal		B. Ruotolo
		Y. Wojcicki

S. Morse convened the Institutional Biosafety Committee (the **Committee**) at 1:03pm.

S. Morse asked the Committee to approve the minutes of the May 8th, 2025 meeting.

- **The minutes were approved unanimously.**

S. Morse reminded the Committee of the Conflict of Interest Policy and asked all members to confirm that there were no conflicts of interest with regard to any of the protocols to be discussed at the meeting.

- **There were no conflicts of interest noted.**

DURC Review

- No protocols requiring DURC review were submitted to the Biosafety Officer or to the Committee since the previous meeting.

Human Gene Therapy

- No human use protocols were submitted to the Biosafety Office for review

Biosafety Office Reviews

- No renewals for Coronavirus Research have been submitted to the Biosafety Office since the last meeting.

Coronavirus Research

- No new Coronavirus research proposals were received by the Biosafety Office since the previous meeting.

rDNA

Six rDNA and infectious agent appendices requiring work at the BSL-1 containment level were presented and discussed. A table describing each BSL-1 Appendix A was shown to the Committee and is available at the Biosafety Office.

- Five appendices were returned to the investigator for further information as shown in a Table presented to the Committee describing the nature of each hold comment.
- After Discussion by the Committee, all six BSL-1 Appendices were voted upon collectively and approved unanimously.

Four rDNA and infectious agent appendices requiring work at the BSL-2 containment level were presented and discussed. A table describing each BSL-2 Appendix A was shown to the Committee and is available at the Biosafety Office.

- Two appendices were returned to the investigator for further information as shown in a Table presented to the Committee describing the nature of each hold comment.
- After Discussion by the Committee, all four BSL-2 appendices were voted upon collectively and approved unanimously.

Announcements

- An amended charge was presented to the committee outlining that only research subject to the NIH Guidelines will be reviewed by the Institutional Biosafety Committee.
- Attila Losonczy, a voting member, is departing from the Institutional Biosafety Committee.

Reports

- There were no new reports since the last committee meeting.

rDNA Incidents

- There were no incidents reported to the Biosafety Office.

Action Items

Action Items from 06-05-25 IBC meeting		
Status	**Description**	**Group/Investigator**
N/A	**N/A**	**N/A**

With there being no further business S. Morse adjourned the meeting at 1:43 pm. The next meeting will be held by teleconference on July 10th, 2025.

2025 Meeting Calendar

Date
Thursday, January 16, 2025
Thursday, February 13, 2025
Thursday, March 13, 2025
Thursday, April 10, 2025
Thursday, May 8, 2025
Thursday, June 5, 2025
Thursday, July 10, 2025
Thursday, August 7, 2025
Thursday, September 11, 2025
Thursday, October 9, 2025
Thursday, November 6, 2025
Thursday, December 4, 2025

IBC Meeting: June 5, 2025

Table 1: Recombinant DNA proposals

Proposals for Work at BSL-1

	PI	Insert	Vector	Host	Animal Biosafety Level	NIH category	Use/Comments	Year	Protocol #	Appendix A
1	Anacker, Christoph	GCamp6f, jRGECO1b, serotonin biosensors, the DREADD hM3Dq and hM4Di	AAV	Mouse	ABSL-1	III-E-1	Mice brains will be virally injected with adeno-associated virus (AAV) expressing GCamp6f, jRGECO1b (to measure calcium activity), serotonin biosensors (to measure serotonin levels), or the DREADD hM3Dq and hM4Di (an artificial receptor which induces neuronal burst-firing upon injection with the compound clozapine-N-oxide).	Y1 M0	LS-AAAD4452	BQGG8752
2	Johny, Manu	The vector includes engineered proteins that contain a selective nanobody that targets cardiac Na channel or designed modulator of Ca channels. differents genes will be expressed: (1) GFP, (2)nbFixR-OTUD1, (3) ELIXIR, (4) IQB3, (5) Campari and (6) GEECC.	AAV	Mouse	ABSL-1	III-E-1	The AAV9 viral vector encodes engineered protein that seeks to reverse altered function of voltage-gated Na and Ca channels in the heart linked to cardiac arrhythmias. Specifically, we have developed and validated selective cardiac Na and Ca channels actuators that can upregulate Na and Ca currents and prevent pathological leak. Based on in vitro studies, the engineered proteins will have minimal effects on wild-type channels.	Y1 M2	AC-AABI1550	BOBI6267
3	Miller, Jae-eun	GCaMP7	AAV	Mouse	ABSL-1	III-E-1	To understand the pathophysiology of AD at the circuit level, we will use optical tools to image and manipulate neuronal ensembles during a spatial navigation behavior in mice that have been injected with an AAV encoded GCaMP and implanted with an optical fiber during stereotaxic surgery.	Y1 M1	AC-AABM7554	BQPF3752
4	Myeku, Natura	MAPT gene normal or with P301L mutation attached to a fluorescence protein marker.	AAV	Mouse	ABSL-1	III-E-1	We plan to inoculate AAV-tau to express human tau protein in the brain of L7M1 and WT mice derived from a non-pathogenic virus from the Parvoviridae family, rAAV vectors efficiently transfer genes of interest to a broad range of mammalian cell types, leading to high levels of stable a long-term expression after a single application within the nanoliter range. The aim of the project is to investigate whether tau is propagated to non-neuronal cells in a mouse model of immuno-proteasome KO (L7M1). We will also inoculate mice with human and cell lysate and cell culture lysates Cell culture extract will be prepared in sterile PBS and filter sterilized through a 0.2um filter. The sterile extract will be stored at -80 in single-use aliquots. Human brain extract will be prepared in sterile PBS and filtered through a	Y1 M0	AC-AACI0901	BQJK2503
5	Schwabe, Robert	R-Spondin 3 (Rspo3) and CTNNB1-S45Y (activated beta catenin)	AAV, E.coli CHS7-STAMP	Mouse	ABSL-1	III-E-1	AAV8-TBG-empty, AAV8-TBG-Rspo3 or AAV8-TBG-CTNNB1-Y45 will be used tto overexpress Rspo3 or Ctnnb1 in hepatocytes in vivo. E.coli strain CHS7-STAMP will be used to induce liver abcesses.	Y1 M1	AC-AABQ5565	BQJG3751
6	Tsuji, Moriya	human GM-CSF, human IL-3, human IL-15, and HLA-A2	AAV	Mouse	ABSL-1	III-E-1	Human genes encoding HLAA2 and selected human cytokines, including GM-CSF, IL-3, and IL-15, will be introduced to a group of NSG mice using AAV serotype 9 (AAV9) vector. Two weeks later, AAV-transduced mice will be sublethally irradiated at 150 rad, immediately followed by engrafting human hematopoietic stem cells isolated from cord blood cells. We will then monitor the levels of reconstitution of human CD45+ cells and other lymphocyte subsets, e.g. T cells, B cells, NK cells and DCs.	Y1 M0	AC-AACH9903	BQDL2507

Proposals for work at BSL-2

	PI	Insert	Vector	Host	Animal Biosafety Level	NIH category	Use/Comments	Year	Protocol #	Appendix A
7	Diano, Sabrina	cre recombinase, reporter genes (tomato, mCherry and EGFP), hM3Dq, hM3Ds, hM4Di, KORD, Gcam, TVA, oG.	AAV, RVdG, PRV	Mouse	ABSL-1 (Note 3)	III-E-1, III-D-1 a	We use AAV to target specific cells in order to identify and study them for metabolic purposes. Pseudorabies Viruses will be injected into muscles to define neuronal circuits upstream. EnvA-G-deleted rabies will be used to define neuronal circuits within brain across single synapses.	Y1 M8	AC-AABI0565	BQDL2506
8	McConville, Thomas	Cas9, Lambda Red Recombineering Genes, gRNA	CRISPR plasmids, Klebsiella pneumoniae, Enterobacter cloacae, Pseudomonas aeruginosa, Acinetobacter baumannii	Galleria mellonella	ACL-1 (Note 5)	III-D-1-a	We will be collecting all carbapenem resistant Gram-negative bacteria from the clinical microbiology laboratory. We will identify all instances of carbapenem resistance in Klebsiella pneumoniae, Enterobacter cloacae complex, Pseudomonas aeruginosa and Acinetobacter baumannii via a Data Warehouse search. We will then screen all identified clinical isolates for cefiderocol resistance via broth microdilution. We will identify all cefiderocol resistant isolates and perform whole genome and RNA sequencing. We will generate a comprehensive list of mutations in the resistant isolates. We will then use CRISPR-Cas9 to insert the identified mutations into carbapenem resistant, but cefiderocol susceptible clinical isolates. We will then test these generated isogenic mutants for cefiderocol resistance.	Y1 M0	IRB-AAAV8275	BQDL2500
9	Passegue, Emmanuelle	Bcl-2 family (gRNA or shRNA against murine Bax, Bak, Bok, Bim, Bid, Puma, Noxa, Bad, BMF, BclXL, Bcl2, Mcl1, BclB, BclG, BclW, A1, Mil1, Mule, Hrk, Bik, BPR, or BNIP), BCR-ABL (Transgene), JunB (gRNA or shRNA against murine JunB), Mcm (gRNA or shRNA against murine Mcm4 or Mcm6), mir-199 (Transgene), MLL-ENL (Transgene), MPL (Transgene), Trp53 (gRNA or shRNA against murine Trp53), Luciferase (Transgene), Rest (shRNA)	AAV, LV, MMLV, Staphylococcus aureus; Mycobacterium bovis BCG-TICE, Candida albicans	Mouse	ABSL-2	III-E-1, III-D-1 a, III-F	We will use retroviral and lentiviral vectors to transfect hematopoietic stem and progenitor cells to either disrupt gene expression through shRNA or CRISPR to drive expression of a transgene. Additionally, we will use the bacterial and fungal pathogens S. aureus and C. albicans to measure the control of these pathogens by a hematopoietic system that has been previously activated by emergency myelopoiesis stimulation (e.g. with treatment of beta-glucan or anti-Ly6G). We expect that hematopoietic stem and progenitor cells that have previously activated to more rapidly generate the immune cells necessary to combat infection with either S. aureus or C. albicans.	Y1 M7	AC-AABG3555	BQDL2510
10	Steckelberg, Anna-Lena	eIF3A3, Upf1, MAGOH, Y14, ZIKV capsid, GFP, Luciferase	ZIKV (MR766, PRVABC59), WNV (pWNV lineage I), DENV2, SINV (KT121726.1), USUV	In vitro	N/A	III-D-1-a	Our lab has a long-standing interest in the viral manipulation of gene regulation during infection. In this study, we will explore how different positive sense RNA viruses interact with the cellular machinery in cultured mammalian and mosquito cells. The following mosquito-borne flaviviruses will be cultured in our lab: 1. Zika virus (MR766 and PRVABC59), 2. West Nile Virus ((pWNV lineage I, NY99), 3. DENV2, 4. Usutu virus (USUV). In addition, we will culture the alphavirus Sindbis virus (SINV). Viruses are produced through transfection of cultured mammalian cells with DNA plasmids containing the viral genomes. We will infect mammalian and mosquito cell lines, and analyze infected cells using standard biochemical, molecular biology and virological assays (e.g. western blotting, northern blotting qRT-PCR, plaque assays, flow cytometry, fluorescence microscopy). We will also introduce mutations to the viral genomes to disrupt functions.	Y1 M0	LS-AAAD4400	BQDL2508

Note1: The Biosafety Office allows Stereotaxic injections to be designated as ABSL-1

Note2: The Biosafety Office allows Transduced cell injections that are free from virus to be designated as ABSL-1

Note3: The Biosafety Office allows the administration of replication deficient vectors or attenuated strains to be designated as ABSL-1

Note 4: BSL-2 practices for Fish procedures: store rVSV-infected fish within BSL1 satellite facility, in sealed disposable containers on a designated rack clearly labeled for PI handling only. Following euthanasia, water and containers will be decontaminated with >10% bleach prior

Note 5: BSL-2 agent handled with risk mitigation measures