

Institutional Biosafety Committee Minutes

Date: Wednesday, September 17, 2025

Time: 9:30 AM

Location: Zoom Meeting

MEMBERS IN ATTENDANCE MEMBE

Busch, Robert H
Carroll, Ann M.
Finkernagel, Scott W.
Kaminsky, Stephen M.
Lieggi, Christine
McGuinn, Catherine
Otero, Miguel
Repik, Gabrielle
Schnappinger, Dirk
Wagner, John A.
Willis, Dianna E.

MEMBERS ABSENT STAFF

Brown, Anthony

Gonzalez Russi, Sabrina Lejb, Katarzyna

Meeting Minutes for Approval

August 20, 2025

System error acknowledged and corrected. No other issues were raised, and the committee approved the minutes from August 20, 2025.

Safety Officer Report

• NIH new biosafety modernization initiative

New Business

• In Memoriam- Dr. Gross

Conflicts of Interest Disclosure:

No member of the IBC may participate in the review of any project in which the IBC member is an investigator, has a financial conflict of interest, or has any other interest which has an adverse impact on the IBC member's ability to exercise independent judgment. Under such circumstances, the IBC member shall not be present during IBC deliberations, except to provide information requested by the IBC. Each member of the IBC shall respect and preserve the confidentiality of information he/she receives as a member of the IBC, and shall use, discuss, and/or disclose such information only for purposes related to deliberations or other assigned business of the IBC.

• Dr. Kaminsky reported a Conflict of Interest with Dr. Kelly's registration listed on the agenda.

Laboratory Safety Registrations - 2-Year Renewals

Record Number: 19-0432 PI Name: Miklos Toth Submission Type: Renewal

Notes: The assigned IBC member reviewed the lab protocol and noted no changes associated with this renewal. The reviewer noted that the research description includes DNMT3a overexpression, however this is not included in the biological/microbiological microorganism tracking table. No other issues were raised. With the administrative change of adding DNMT3a overexpression to the biological/microbiological microorganism tracking table, the reviewer recommended approval of AAV at ABSL-1 and Lentivirus at ABSL-2/BSL-2.

Decision: Approved with administrative changes

Recombinant Microorganism Tracking Table:

Recombinant Microorganism Tracking Table:

Microorgani sm for Recombinan t work	Other microorgan ism name	List strains/ser otypes for constructs	Ability to replicate in the cell	Cell/cell type where microorgani sm/vector will be propagated/ packaged	In vivo or in vitro?	Cell type where expressed	ueieieu,	Original source(s) species of DNA/ R NA	Biological activity/pote ntial of gene modification	Manipulation types performed/plan ned	Assigned Biosafety Level(s)	Regulatory Rationale	Applicabl e NIH Guidelin es
Adeno- Associated Virus (AAV)		AAV 1-1 2	Replication Incompete nt/ Deficient	N/A	In Vivo	In vivo	synaptophysin, channel rhodopsin, halorhodopsin, archaerhodopsin, DRE ADDs, GFP, YFP, mCherry, mCitrine, DNMT3a	Other/	Marker/ Reporter ~ Other/ AAV is interjected into targeted location in the brain.	Direct inject into In vivo model ~ Express/Upregul ate gene of interest ~ Repress/ Downregulate gene of interest	ABSL-1	NIH Applicable	Section II I-D-4
Lentivirus [Retroviridae/ Lentiviridae]		pLenti-P3 A, B, C(A BM), piL entisiRNA- GFP (A BM)	Attenuated ~ Replication Incompeten t/Deficient	293T	Both	In vivo	si-RNA for neurexin I and II	Bacteria ~ Other/ Bacteria	Gene Expression Regulators	Direct inject into In vivo model ~ Express/Upregul ate gene of interest ~ Repress/ Downregulate gene of interest	ABSL-2 ~ BSL-2	NIH Applicable	Section II I-D-1 ~ Section III -D-3 ~ Section III- D-4

Record Number: 19-0455

PI Name: Manikkam Suthanthiran Submission Type: Renewal

Notes: The assigned IBC member reviewed the lab protocol and noted no changes associated with this renewal. No issues were

raised. The reviewer recommended approval at previously assigned biosafety levels.

Decision: Approved

Biological/Microbiological Microorganism Tracking Table:

Biological/Microbiological Microorganism Tracking Table:

Microorganism f or Biological/Microbiolo gical work		nism	List strains/serotypes for constructs	Ability to replicate in the cell	In vivo or in vitro?	Manipulation types performed/planned	Assigned Biosafety Level(s)	Regulatory Rationale	Applicable NIH Guidelines
*Other	Human Transplant samples	Renal Patient	SARS-CoV-2	Replication Competent	In Vitro	Other	BSL-2+	Not rDNA	

Record Number: 19-0506

PI Name: Baolin Wang

Submission Type: Renewal

Notes: The assigned IBC member reviewed the lab protocol, noted no recombinant DNA will be used to generate gene knockout model and the removal of transgenic model. No issues were raised. The reviewer recommended approval at previously assigned biosafety levels and E. Coli at BSL-2.

Decision: Approved

Recombinant Microorganism Tracking Table:

Recombinant Microorganism Tracking Table:

Microorgan ism f or Recombina nt work	Other microorga nism name	List strains/serot ypes for constructs	Ability to replicate in the cell	Cell/cell type where microorgani sm/vector will be propagated/ packaged	In vivo or in vitro?	where	Gene/gen e family to be inserted, deleted, upregulated or downregulated	Original source(s) species of DNA/RNA	Biological activity/potent ial of gene modification	Manipulation types performed/plan ned	Assigned Biosafety Level(s)	Regulator y Rationale	Applicable NIH Guidelines
Lentivirus [Retrovirida e/Lentivirid ae]		CRISPR v2, pLen ti- CMV- puro	Replicatio n Incompet ent/ Deficient	HEK293, NIH3T3, mouse fibroblasts	In Vitro	In vivo	cas 9, Gli 2, gli3, S mo, Ptc, Sufu, Dzi p1, Dzip1 L, Ftm, T a3, ciliary genes, puromycin, neomycin	Murine	Gene Expression Regulators ~ Marker/Report er ~ Oncogenic Gene Sequences	Create virions ~ Express/Upregul ate gene of interest ~ Repress/ Downregulate gene of interest ~ Transfect cell line ~ Transfect cells	BSL-2+	NIH Applicable	Section II I-D-1 ~ Section III- D-3
Murine leukemia virus [Viral vector/In vivo retrovirus]		pLNCX	Replicatio n Incompet ent/ Deficient	E. coli, H EK293, N IH3T3		In vivo	Gli2, gli3, Smo, Ptc, Sufu, Dzi p1, Ftm, Dzip1L, T a3, ciliary genes, neomycin	Murine	Antibiotic Resistance ~ Gene Expression Regulators ~ Oncogenic Gene Sequences	Create virions ~ Repress/Downre gulate gene of interest ~ Transfect cell li ne	BSL-2+	NIH Applicable	Section II I-D-1 ~ Section III- D-3
Escherichia coli [K12]		Non- replicative lentiviral constructs for hedgehog signaling components and ciliary genes such as Ptch1, Smo, Gli 2, Gli3, Dzip1, D zip1L, et c.	Replicatio n Incompete nt/ Deficient	293 cells	In Vitro	In vivo	Hedgehog signaling pathway components and ciliary related genes such as Pt ch1, Smo, Gli2, Gli 3, Dzip1, Dzip1L, etc.	Murine	Antibiotic Resistance ~ Gene Expression Regulators ~Oncogenic Gene Sequences	Create virions ~ Express/Upregul ate gene of interest ~ Repress/ Downregulate gene of interest ~ Transfect cell line	BSL-2	NIH Applicable	Section II I- D-1 ~ Section III- D-2

Record Number: 21-0111 PI Name: James Kelly Submission Type: Renewal

Notes: The assigned IBC member reviewed the lab protocol and noted no significant changes associated with this renewal. No issues were raised. The reviewer recommended keeping approval of AAV at ABSL-1 for in vivo work, however the lab work should be BSL-2 because of transfection work with HEK293 cells.

Decision: Approved

Recombinant Microorganism Tracking Table:

Recombinant Microorganism Tracking Table:

				Cell/cell type			Gene/gene						
				where micro			family to be		Biological				
Microorga	Other	List	Ability to	organism/vector		Cell type	inserted,	Original	activity/pote	Manipulation			
nism for			replicate in	will be propagate	In vivo	where	deleted,	source(s)	ntial of gene	types	Assigned	Regulato	Applicabl
Recombin	microorga		the cell	d/packaged	or in		upregulated or	species of	modification	performed/plan	Biosafety	ry	e NIH
ant work	nism	rotypes	the cen		vitro?	expressed	downregulated	DNA/RNA	modification	ned	Level(s)	Rational	Guidelin
	name	for										e	es
		constructs											

Adeno- Associated	AAV2	Replication Incompetent/	N/A (We will purchase	Both	Human	Beta- galactosidase	Bacteria~ Jellyfish	Marker/ Reporter	Express/ Upregulate gene	ABSL-1~ BSL-2	NIH Applicable	Section II
Virus		Deficient	recombinant			(LacZ) and/or	Jenynsn	reporter	of interest	DOL 2	rippiicuoic	1
(AAV)		Belletelli	reporter/control			green			~ Transfect cell			
			virus from Vector			fluorescent			line			
			Biol abs and			protein (GFP)						
			determine									
			transfect on									
			efficiency in									
			HEK293 cells									
			using the reporter									
			gene)									

Record Number: 22-0013
PI Name: Sarah Cheal
Submission Type: Renewal

Notes: The assigned IBC member reviewed the lab protocol and noted no changes associated with this renewal. No issues were

raised. The reviewer recommended keeping approval at previously assigned biosafety levels.

Decision: Approved

Biological/Microbiological Microorganism Tracking Table:

Biological/Microbiological Microorganism Tracking Table:

Microorganism f or Biological/Microbiolo gical work	List strains/serotypes for constructs	Ability to replicate in the cell	In vivo or in vitro?	Manipulation types performed/planned	Assigned Biosafety Level(s)	Regulatory Rationale	Applicable NIH Guidelines
Salmonella [Typhimurium]	Salmonella 1402 8S (delta msbB)	Attenuated	Both	Conduct Multiplicity of infection (MOI) studies ~ Culturing ~ Introduction into In vivo model	ABSL-2 ~ BSL-2	Not rDNA	

Record Number: 22-0075
PI Name: Mark Bustoros
Submission Type: Renewal

Notes: The assigned IBC member reviewed the lab protocol and noted no changes associated with this renewal. No issues were

raised. The reviewer recommended keeping approval at previously assigned biosafety levels.

Decision: Approved

Recombinant Microorganism Tracking Table:

Recombinant Microorganism Tracking Table:

Recombinan mic	icroorg	List strains/serotypes for constructs	Ability to replicate in the cell	Cell/cell type where microorga nism/vector will be propagated /packaged	in vitro?	Cell type where expressed	Gene/gene family to be inserted, deleted, upregulated or downregulated	Original source(s) species of DNA/RNA	Biologic al activity/pote ntial of gene modification	Manipulation	Assigned Biosafety Level (s)	Regulator y Rationale	Applicabl e NIH Guidelin es
Lentivirus [Retroviridae/ Lentiviridae]		Addgene: pMD2.G- VSV-G envelope expressing plasmid psPAX2- 2nd generation lentiviral packaging plasmid, pLKO5.sgRNA.E FS.GFP (addgene #57822) and pLKO5.sgRNA.E FS.PAC (add gene #57825)	d~ Replicatio n Incompete nt/Deficie nt	Multiple Myeloma cell lines	Both	In vivo ~ Human	SETD2 is considered an oncogene and transcription regulator.	Human ~ Murine	Gene Expression Regulators ~ Oncogenic Gene Sequences	Create virions ~ Direct inject into In vivo model ~ Express/Upreg ulate gene of interest ~ Repress/Down regulate gene of interest~ Transfect cells	ABSL-2+~ BSL-2+	NIH Applicable	Section II I-D-1 ~ Section III- D-3 ~ Section III-D-4

Record Number: 23-0014

PI Name: Benedict Law

Submission Type: Renewal

Notes: The assigned IBC member reviewed the lab protocol and noted no changes associated with this renewal. No issues were

raised. The reviewer recommended keeping approval at previously assigned biosafety levels.

Decision: Approved

Recombinant Microorganism Tracking Table:

Recombinant Microorganism Tracking Table:

Microorganis m for Recombinant work	Other microor ganism name	List strains/se rotypes for constructs	Ability to replicate in the cell	Cell/cell type where microorga nism/vector will be propagate d/packaged		where		Original source(s) species of DNA/RNA	Biological activity/pote ntial of gene modification	nerformed/plann	Assigned Biosafety Level(s)	Regulatory Rationale	Applicabl e NIH Guidelin es
Lentivirus		T2A-RFP	Replication		Both	In vivo ~	Luciferase	Human ~	Antibiotic	Express/	ABSL-1∼ BSL-2	NIH	Section II
[Retroviridae/		-IRES-		commercial		Human	(FLuc), red	Murine	Resistance ~	Upregulate gene of		Applicable	I-D-1 ~
Lentiviridae]		Puro	t/Deficient	sources			fluorescent		Marker/Repo	interest			Section
		Lentivirus	~ Unknow	(Biosetta			protein (RFP),		rter	~ Transfect cell			III- D-3 ~
		LPP-	n	and Gen			puromycin			line ~ Transfect			Section
		PLUM-Lv		eCopeia).			resistance gene			cells			III-D-4
							(Puro), PLUM,			/ introduce into in			
							CMV			vivo model			

Record Number: 23-0075

PI Name: Michelle S. Bradbury

Submission Type: Renewal

Notes: The assigned IBC member reviewed the lab protocol and noted minor changes associated with this renewal. The reviewer requested clarification regarding which vectors are being utilized and enhanced descriptions are required for the various model plans. Further clarification is requested on whether mucin or PDGF-HA are cytokines. No other issues were raised. The reviewer recommended the renewal be tabled and re-reviewed after a more detailed description is provided.

Decision: Registration approval tabled

Record Number: 24-0117 PI Name: Logan Grosenick Submission Type: Renewal

Notes: The assigned IBC member reviewed the lab protocol and the change of adding a serotype of AAV. No issues were raised.

The reviewer recommended keeping approval at previously assigned biosafety levels.

Decision: Approved

Recombinant Microorganism Tracking Table:

Recombinant Microorganism Tracking Table:

Microorganis m for Recombinan t work	Otner	List strains/seroty pes for constructs	Ability to replicate in the cell	Cell/cell type where microorga nism/vecto r will be propagate d/packaged	In vivo or in vitro?	Cell type where expressed	Gene/gene family to be inserted, deleted, upregulated or downregulated	Original source(s) species of DNA/RNA	Biological activity/pote ntial of gene modification	Manipulatio n types performed/p lanned	Assigned Biosafety Level(s)	Regulatory Rationale	Applicable NIH Guidelines
Rabies virus [Rhabdovirida e/Lyssavirus]		SAD-delt aGmCherry, SAD- deltaG- m Cherry (EnvA)		BHK- B19G	In Vivo	In vivo	mCherry rabies for stereotactic injections		Marker/ Reporter	Direct inject into in vivo model ~ Express/Upre gulate gene of interest	ABSL-2 ~ BSL-2	NIH Applicable	Section II I-D-1 ~ Section III- D-4
Adeno- Associated Virus (AAV)		AAV serotypes 1, 2, 5,9	Replication Incompetent/ Deficient	N/A purchased	In Vivo	In vivo	channel rhodopsin 2, GCAM Ps	Murine	Other	Direct inject into in vivo model ~ Express/Upre gulate gene of interest	ABSL-1	NIH Applicable	Section II I-D-4 ~ Section III- F-6
Canine Adenovirus [CAV-1, C AV-2]		CAV-1, C AV-2	Attenuated ~ Replication Incompetent/ Deficient	N/A- purchased	In Vivo	In vivo	channel rhodopsin 2, GCAM Ps	Murine	Other	Direct inject into in vivo model ~ Express/Upre gulate gene of interest	ABSL-2	NIH Applicable	Section III-D-1 ~ Section III-D-4 ~ Section III-F-6

Acknowledgement of Laboratory Safety Registrations: No IBC-Applicable Work Conducted

Record Number		Laboratory Safety Registration Submission Type
19-0697	Jenny Zhaoying Xiang	Lab Registration - Renewal
21-0032	Gene Kim	Lab Registration - Renewal
22-0063	Moustafa Gabr	Lab Registration - Renewal
24-0027	Jack Levy	Lab Registration - Renewal
24-0039	Vanessa Bellat	Lab Registration - Renewal

Laboratory Safety Registrations: Exempt

Record Number	PI Name	Laboratory Safety Registration Submission Type
25-0066	Kaavya Krishna Kumar	Lab Registration - Initial

Acknowledgment of Closed Laboratory Safety Registrations

Record Number	PI Name
19-0502	Elena Piskounova
19-0503	Harold E. Varmus

The meeting adjourned at 10:14 AM.