## **Medical University of South Carolina**

## **Institutional Biosafety Committee Meeting Minutes**

Meeting Date	Thursday, September 11, 2025	
Meeting Time	12:01 PM -1:29 PM	
Meeting Type	Teams Meeting	
IBC Members Present	1. Caroline Westwater, Ph.D., (IBC Chair) 2. John Woodward, Ph.D. (IBC Vice Chair) 3. Christina Voelkel-Johnson, Ph.D., (BSO) 4. Lisa Steed, Ph.D., (IBC Member) 5. Eric Meissner, M.D., (IBC Member) 6. Carlene Brandon, MS. (Local Non-affiliated Member) 7. Anastasia Zimmerman, Ph.D. (Local Non-affiliated Member) 8. Aimee McRae-Clar, Pharm.D., BCPP (IBC Alternate Member; Office of Research Integrity Director)	
Quorum	Number of Members Present (Voting): 8 Number of Members Not Present: 3 Late Arrival of Voting Members: n/a Early Departure of Voting Members:1	
Other Individuals in Attendance	Michael Smith, Ph.D., (IBC Manager) Gloriane Schnabolk Ph.D., (IACUC & IBC Senior Administrator)	
Call to Order	The IBC Chair called the meeting to order at 12:01 PM	
Conflicts of Interests	The IBC Chair reminded all members present to identify any conflicts of interest before each registration is reviewed.	
Review and Approval of Previous Meeting Minutes	July 10, 2025, August 14, 2025, September 11, 2025 IBC meeting minutes will be discussed.	
Review of Prior Business  New IBC Registration and Amendment	Meeting minutes format discussion SOP signature discussion NIH launched Initiative to Modernize and Strengthen Biosafety Oversight.  nts for Review (repeat for each registration)	

Protocol #	IBC-25-308	
PI Name	Bergmann, Shayla	
Study Title	A phase 1/2 study evaluating the safety and efficacy of a single	
	dose of autologous base edited hematopoietic stem cells to	
	increase production.	
Agent	☐ Plasmid DNA/mRNA	
	CRISPR/Cas9 technology	
	☐ Molecular grade Escherichia coli	
	☐ Laboratory grade strains Saccharomyces cerevisiae	

	Replication-defic	cient viral vectors	
	RG1 microbes		
	RG2 microbes		
	Biological toxins		
	Gene modified mouse cells		
	Gene modified hu <u>man ce</u> lls		
		s base edited he	ematopoietic stem cells
rDNA Category	III-C		
Genetically modified	N/A		
microbes or vectors			
Transgene expression			
Highest BSL	BSL2		
Training	Complete Per	nding	
Risk Assessment of	PPE is appropriate f	for 🗍 BSL1 🔀 BSL2 🗌	ABSL1 ABSL2
Procedures		Chemical inactivation \( \subseteq \)	
	Aerosol handling: N	/A ⊠ Yes □	-
	Centrifugation: N/A	Sealed rotors/safety	caps 🗌
		′A 🔀 Standard sharps p	
	Transport: N/A 🔲 D	ouble sealed, durable le	eak-proof container with
	biohazard label 🛛		
	Any special considerations No ⊠ Yes □		
88.4			
Motion	☐ Straight approval ☐ Conditional approval with administrative post-review		
First.	Conditional approval with subcommittee post-review		
First:	Meissner	Second:	Westwater
Votes	Againatio	A hatain a d.O	Daguard O
For:8	Against:0	Abstained:0	Recused:0
Protocol #	IBC-25-306		
PI Name	Mulholland, Patrick		
Study Title	Mulholland Lab IBC		
Agent	☐ Plasmid DNA/mF	RNA	
	CRISPR/Cas9 technology		
	☐ Molecular grade Escherichia coli		
	Laboratory grade strains Saccharomyces cerevisiae		
	Replication-deficient viral vectors		
	RG1 microbes		
	RG2 microbes		
	Biological toxins		
	Gene modified mouse cells		
	Gene modified human cells		
	U Other		
rDNA Category	III-D1a, III-D-4-b		
Genetically modified	Adeno-Associated v	virus	
microbes or vectors			

Transgene expression	GCaMP reporters, OxLight1, Kcnq3, Cre, DREADDS, hChR2 h134R, ChroME-ST, SwiChRca, EYFP, mCherry, mRuby, EGFP, SaCas9.		
Highest BSL	BSL2, ABSL-2		
Training	Complete Per	nding	
Risk Assessment of Procedures	PPE is appropriate for  BSL1 BSL2 ABSL1 ABSL2 Waste handling:  Chemical inactivation Physical inactivation Aerosol handling: N/A Yes Centrifugation: N/A Sealed rotors/safety caps Sharps handling: N/A Standard sharps precautions Transport: N/A Double sealed, durable leak-proof container with biohazard label Any special considerations No Yes		
Motion	<ul> <li>         ⊠ Straight approval         □ Conditional approval with administrative post-review         □ Conditional approval with subcommittee post-review     </li> </ul>		
First:	Woodward	Second:	Westwater
Votes			
For:8	Against:0	Abstained:0	Recused:0

Protocol #	IBC-25-302
PI Name	Sambamurti, Kumar
Study Title	PA-Alzheimer's Drug Development Program (ADDP)-U01-L-DOPA
Agent	☐ Plasmid DNA/mRNA ☐ CRISPR/Cas9 technology ☐ Molecular grade Escherichia coli ☐ Laboratory grade strains Saccharomyces cerevisiae ☐ Replication-deficient viral vectors ☐ RG1 microbes ☐ RG2 microbes ☐ Biological toxins ☐ Gene modified mouse cells ☐ Gene modified human cells ☐ Other
rDNA Category	III-D-4-b
Genetically modified microbes or vectors	Escherichia coli Nissle 1917
Transgene expression	E. coli HpaBC operon
Highest BSL	BSL2, ABSL-2
Training	

Risk Assessment of Procedures	PPE is appropriate for   BSL1  BSL2  BSL1  ABSL1  ABSL2  Waste handling:  Chemical inactivation  Physical inactivation  Aerosol handling:  N/A  Yes  Centrifugation:  N/A  Sealed rotors/safety caps  Sharps handling:  N/A  Standard sharps precautions  Transport:  N/A  Double sealed, durable leak-proof container with  biohazard label  Any special considerations  No  Yes		
Motion	☐ Straight approval ☐ Conditional approval with administrative post-review ☐ Conditional approval with subcommittee post-review		
First:	Woodward	Second:	Westwater
Votes			
For:8	Against:0	Abstained:0	Recused:0
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Protocol #	IBC-25-318
PI Name	Mehrotra, Meenal
Study Title	Bone and dental cell engineering
Agent	☐ Plasmid DNA/mRNA
	CRISPR/Cas9 technology
	Molecular grade Escherichia coli
	Laboratory grade strains Saccharomyces cerevisiae
	Replication-deficient viral vectors
	RG1 microbes
	RG2 microbes
	☐ Biological toxins
	Gene modified mouse cells
	Gene modified human cells
IIDNIA Coto no III	Other
rDNA Category	III-D1a
Genetically modified microbes or vectors	Lentiviral vector
microbes or vectors	
	D36, SphK1/2, Spns2, S1P receptors, Akt, mTOR, IL10, ferritin
Transgene expression	light/heavy chains, BMPR, GSK3B, YAP
	,
Highest BSL	BSL2, ABSL2
Training	☐ Complete ☐ Pending
Risk Assessment of	PPE is appropriate for ☐ BSL1 ☐ BSL2 ☐ ABSL1 ☐ ABSL2
Procedures	Waste handling: ⊠ Chemical inactivation ⊠ Physical inactivation
	Aerosol handling: N/A ☐ Yes ☒
	Centrifugation: N/A Sealed rotors/safety caps
	Sharps handling: N/A  Standard sharps precautions
	Transport: N/A Double sealed, durable leak-proof container with
	biohazard label
	Any special considerations No ⊠ Yes □

Motion	Straight approva		
	Conditional appre	Conditional approval with administrative post-review	
	Conditional approval with subcommittee post-review		
First:	Westwater	Second:	Voelkel-Johnson
Votes			
For:8	Against:0	Abstained:0	Recused:0

Protocol #	IBC-25-293		
PI Name	Tew, Ken		
Study Title	Investigating glutath	ione pathways for cance	er drug development
Agent	<ul> <li>☐ Plasmid DNA/mRNA</li> <li>☐ CRISPR/Cas9 technology</li> <li>☑ Molecular grade Escherichia coli</li> <li>☐ Laboratory grade strains Saccharomyces cerevisiae</li> <li>☑ Replication-deficient viral vectors</li> <li>☑ RG1 microbes</li> <li>☐ RG2 microbes</li> <li>☐ Biological toxins</li> <li>☑ Gene modified rodent cells</li> <li>☑ Gene modified human cells</li> <li>☐ Other</li> </ul>		
rDNA Category	III-D1a,, III-D4b		
Genetically modified microbes or vectors	Pichia pastoris; Lentiviral vector		
Transgene expression	Luciferase, GSTP, MGST1, Srx, Grx, Trx, GRP78, GPX4, tyrosinase, ER-alpha, PDI, VDAC		
Highest BSL	BSL2, ABSL2		
Training	Complete Per	nding	
Risk Assessment of Procedures	PPE is appropriate for   BSL1  BSL2  ABSL1  ABSL2 Waste handling:  Chemical inactivation  Physical inactivation  Aerosol handling:  N/A   Sealed rotors/safety caps  Sharps handling:  N/A   Standard sharps precautions  Transport:  N/A   Double sealed, durable leak-proof container with biohazard label  Any special considerations  No  Yes		
Motion	· <del></del>	l oval with administrative   oval with subcommittee	post-review
First:	Voelkel-Johnson	Second:	Westwater
Votes			

For:8	Against:0	Abstained:0	Recused:0

Protocol #	IBC-25-319		
PI Name	Mehrotra, Shikhar		
Study Title	T cell Immunotherapy		
Agent	<ul> <li>☐ Plasmid DNA/mRNA</li> <li>☐ CRISPR/Cas9 technology</li> <li>☐ Molecular grade Escherichia coli</li> <li>☐ Laboratory grade strains Saccharomyces cerevisiae</li> <li>☐ Replication-deficient viral vectors</li> <li>☐ RG1 microbes</li> <li>☐ RG2 microbes</li> <li>☐ Biological toxins</li> <li>☐ Gene modified rodent cells</li> <li>☐ Gene modified human cells</li> </ul>		
rDNA Category	│		
Genetically modified microbes or vectors	Retro-and lentiviral	vectors	
Transgene expression	LC3-GFP-RFP, fluorescent and luminescent reporters, T cell receptor genes and CAR genes. Pim kinases, sphingosine kinases, sestrin family genes, lipase family genes, and purinoreceptor family genes, ER stress response genes, glucose transport, RNA binding, the delta opioid receptor, endocannabinoid receptors, lipid transporters, NAD metabolism, antioxidants, organelle biogenesis, gap junction family, heat and pain sensors/receptors, cystathionine-b-synthetase and acetyl CoA carboxylase, Tbet, Gata, IRF4, Runx1, Eomes, and FoxP3, Cas9		
Highest BSL	BSL2, ABSL2		
Training	Complete Per	nding	
Risk Assessment of		for 🗍 BSL1 🔀 BSL2 🗌	ABSL1 X ABSL2
Procedures	Waste handling:  ☐ Chemical inactivation ☐ Physical inactivation Aerosol handling: N/A ☐ Yes ☐ Centrifugation: N/A ☐ Sealed rotors/safety caps ☐ Sharps handling: N/A ☐ Standard sharps precautions ☐ Transport: N/A ☐ Double sealed, durable leak-proof container with biohazard label ☐ Any special considerations No ☐ Yes ☐		
Motion	☐ Straight approval ☐ Conditional approval with administrative post-review ☐ Conditional approval with subcommittee post-review		
First:	Voelkel-Johnson	Second:	Westwater
Votes			
For:8	Against:0	Abstained:0	Recused:0

Meeting Adjournment	The IBC Chair called for the meeting to be
	adjourned at 1:29 PM