## University of Nebraska - Lincoln Institutional Biosafety Committee

## Minutes of Regular IBC Meeting

Date: September 8, 2025

Location: Remote via Zoom

Call to Order: D. Loy called the meeting to order at 2:31 PM

**Members Present:** T. George (Community Member), K. Heath (Animal SME), A. Hilske (Plant SME), D. Loy (Chair), A. Mitra (Plant SME), K. O'Neil (Community Member), W. Niu (Member), N. Sexton (Member), D.

Zinniel (Lab Rep)

Members Absent: H. Blair (BSO), D. Petrik (Community Member), M. Wiebe (Member)

Quorum Met: Yes

Ex-Officio Advisors: D. Hamernik, B. Osthus, R. Wenzl, S. Quinn

Others: R. Cederberg, L. Gregurek, A. Jungck, E. Schulz, K. Evans, Lauren Hauser

Review of Minutes from 8/11/2025 Meeting:

Motion to approve minutes made by A. Mitra, 2nd by D. Zinniel

Minutes approved unanimously as written.

For: 6 Against: 0 Abstained: 3

**Declaration of Conflicts of Interest**: D. Loy (103)

## I. PUBLIC SESSION

### A. Old Business:

## 1. Tabled Protocol registrations: None

### 2. Protocols with Contingencies Met:

NuRamp ID:	35		
Form ID:	26068		
TITLE:	Genetic Improvement of Sorghum for Bioenergy, Feed, and Food		
	Uses and Responses to Pathogens		
PI:	Scott Sattler		
DEPT:	Department of Agronomy & Horticulture		
Project Biosafety Level:	BSL-2		
NIH Guidelines reference:	III-F-5, III-F-8, C-II, III-E, III-E-2, III-E-2-a		
Date of IBC Review:	7/14/2025		
IBC MOTION:	- Provide an updated pathogen inventory, confirm location and		
IBC MOTION:	status of pathogens, and update permits		
IBC ACTION:	Adopted by voice vote		
PROTOCOL NOTES:			
Date of PI Response:	8/21/2025		

Fax: 402.472.9650

PI Response:	Updated pathogen inventory (with location and status) and permits were uploaded.
Additional Comments:	None.

## **B. New Business:**

## 1. New Protocol Registrations: None

## 2. Protocol Amendments:

NuRamp ID:	1359		
Form ID:	26176		
TITLE:	Assessing the role of fatty acid metabolism in development		
	of metabolic diseases.		
PI:	Tomasz Bednarski		
DEPT:	Nutrition and Health Sciences		
REVIEWED BY:	Full IBC Committee		
Protocol Biosafety Level:	BSL-2, ABSL-1 (Animal)		
NIH Guidelines reference:	III-F-8, C-I, C-VII, C-VIII, III-E-1, III-D-4-a (new)		
IBC MOTION:	Approve with the following contingencies:		
Contingencies/Issues:	<ul> <li>Staff completes required training</li> </ul>		
Made by:	N. Sexton		
Seconded by:	K. Heath		
IBC ACTION:	Adopted by voice vote		
For:	7		
Against:	0		
Abstained:	2		

PROTOCOL NOTES:	
Review of Protocol:	The IBC Chair provided an overview of the protocol and opened
	discussion to the committee.
Summary of Project(s):	Underlying molecular mechanisms of metabolic disease (MetS) are poorly understood. Evidence indicates that high intake of saturated fatty acids increases the risk of MetS in prospective studies, while a high intake of polyunsaturated fatty acids (PUFAs) reduces that risk. PUFAs are precursors for a plethora of signaling lipids and are critical for the regulation of membrane biophysical properties.
Changes to the Protocol:	Updated mouse cell lines, added a human cell line, AAV treatments, and added new NIH Guideline III-D-4-a. Title changed to reflect wider scope of work.
Risk Assessment Considerations:	
Genetic Material:	Metabolism genes
Vector system:	rAAV
Microbiological agents:	N/A

Organisms:	Updated mouse strains					
OTCC:	Mouse organs, cell lines (mouse and human)					
Toxins:	N/A					
IRB protocol(s):	□Yes	⊠No	SR	OC protocol:	□Yes	⊠No
IACUC Protocol(s):	<b></b> ✓Yes	□No				
Facility/Safety Summary:	The Committee reviewed the description of the facilities to be			ne facilities to be		
	used an	d safety p	roce	dures and deter	rmined t	he facilities are
	appropi	riate for tl	ne pr	oposed contain	ment lev	vel and work to be
	conduct	ted.				
Safety Concerns:	None					
Facility Concerns:	None					
Vaccine/Medical Surveillance:	Hepatitis B vaccine					
Administrative issues:						
Current safety training for staff:	Staff training deficiencies.					
Current equipment certification:	Yes.					
Date/Result of last EHS Survey:	Annual			Findings:		
Date/Nesalt of last Eris survey.	1/17/2	025		No findings.		
	The committee had questions about whether the PI was using					
	cell lines or organisms for AAV treatments, and the Assistant					
IBC Discussion:	Biosafety Officer confirmed the PI is only currently using cell					
ibe biseassion.	lines in	the projec	ct. Th	ne Assistant Bio	safety O	fficer explained
	that addition of new NIH guidelines is related to newly					
	proposed work with AAV treatments in animals.					

NuRamp ID:	28		
Form ID:	26175		
TITLE:	UNL BPDF - Process Development and Pre-clinical		
	Manufacturing of Recombinant Proteins		
PI:	Scott Johnson		
DEPT:	Biological Process Development Facility		
REVIEWED BY:	Full IBC Committee		
Protocol Biosafety Level:	BSL-1-LS (Large Scale)		
NIH Guidelines reference:	III-F-2, III-F-6, III-E, III-D-2-a, III-D-6		
IBC MOTION:	Approve as written.		
Contingencies/Issues:	• None		
Made by:	K. Heath		
Seconded by:	D. Zinniel		
IBC ACTION:	Adopted by voice vote		
For:	8		
Against:	0		
Abstained:	1		
PROTOCOL NOTES:			

Review of Protocol:	The IBC Chair provided an overview of the protocol and opened discussion to the committee.		
Summary of Project(s):	This protocol covers all generic recombinant protein development and production projects where the product and/or process is designed for eventual use in human clinical trials or reagent use. Typically projects involve recombinant protein expression using a microbial system, i.e. yeast or E. coli systems and purification using conventional bioprocess techniques, i.e. column chromatography and tangential flow filtration, to produce a bulk drug substance with suitable quality to be used for human clinical trials.		
Changes to the Protocol:	Added two new prote plasmid.	in vaccines being expressed in E. coli with	
Risk Assessment Considerations:			
Genetic Material:	Malaria and Leishman	nia antigens	
Vector system:	N/A		
Microbiological agents:	N/A		
Organisms:	N/A		
OTCC:	N/A		
Toxins:	N/A		
IRB protocol(s):	□Yes ☑No <b>SR</b>	<b>OC protocol:</b> □Yes ☑No	
IACUC Protocol(s):	□Yes ☑No		
Facility/Safety Summary:	The Committee reviewed the description of the facilities to be used and safety procedures and determined the facilities are appropriate for the proposed containment level and work to be conducted.		
Safety Concerns:	None		
Facility Concerns:	None		
Vaccine/Medical Surveillance:	None		
Administrative issues:			
Current safety training for staff:	Yes.		
Current equipment certification:	Yes.		
Date/Result of last EHS Survey:	Annual	Findings:	
	2/14/2025	All findings addressed.	
IBC Discussion:	The committee had no concerns and determined the risk assessment to be similar to previously approved projects.		

NuRamp ID:	1341
Form ID:	26116
TITLE:	Strategies for Biological Agent Treatment Using Natural
	and Novel Materials
PI:	Eric Carnes
DEPT:	Biological Systems Engineering
PI:	and Novel Materials Eric Carnes

REVIEWED BY:		Full IBC Committee		
Protocol Biosafety Level:		BSL-2		
N	IH Guidelines reference:	III-E, III-D-1-a, III-D-3	-a	
IE	BC MOTION:	Approve as written.		
	Contingencies/Issues:	<ul> <li>None</li> </ul>		
N	lade by:	D. Zinniel		
S	econded by:	K. O'Neill		
IE	BC ACTION:	Adopted by voice vote	2	
	For:	7		
	Against:	0		
	Abstained:	2		
P	ROTOCOL NOTES:			
	Review of Protocol:	The IBC Chair provide discussion to the com	d an overview of the protocol and opened mittee.	
	Summary of Project(s):	for biological agent tre bacteriophage from en	everal avenues to identify new strategies eatment, including the isolation of nvironmental samples and screening of rial effectiveness in inhibiting/controlling	
	Changes to the Protocol:	Updated PI, Pathogeni	c Microorganisms and Biological Toxins and removed animal work.	
	Risk Assessment Considerations:	nots, added new strain	is and removed animal work.	
	Genetic Material:	N/A		
	Vector system:	N/A		
	Microbiological agents:	•	Bacillus atrophaeus, Yersinia pestis	
	Organisms:	N/A		
	OTCC:	N/A		
	Toxins:	N/A		
	IRB protocol(s):	□Yes ☑No <b>SR</b>	OC protocol: □Yes ☑No	
	IACUC Protocol(s):	□Yes ☑No	•	
	Facility/Safety Summary:	The Committee review used and safety proceappropriate for the proceducted.	ved the description of the facilities to be dures and determined the facilities are oposed containment level and work to be	
	Safety Concerns:	None		
	Facility Concerns:	None		
	Vaccine/Medical Surveillance:	None		
	Administrative issues:			
	Current safety training for staff:	Yes.		
	Current equipment certification:	Yes.		
Date/Result of last EHS Survey:		Annual	Findings:	
	Dute, Result of last Elis salvey.	1/24/2025	No findings.	

	Committee had questions about PI's updated pathogen		
Inc Biss seiter	inventory and wanted clarification that while the inventory list		
IBC Discussion:	is long, only those pathogens listed in section III on the protocol		
	are actually in use and the rest are in storage.		
NuRamp ID:	55		
Form ID:	26061		
TITLE:	Gene regulation and signaling in the fungal model		
	organism Candida albicans and other yeasts		
PI:	Kenneth Nickerson		
DEPT:	School of Biological Sciences		
REVIEWED BY:	Full IBC Committee		
Protocol Biosafety Level:	BSL-2 (proposed)		
NIH Guidelines reference:	III-F-1, III-E, III-D-2-a		
BC MOTION:	Approve with the following contingencies:		
Contingencies/Issues:	Staff complete required training		
Made by:	A.Mitra		
Seconded by:	K. Heath		
BC ACTION:	Adopted by voice vote		
For:	9		
Against:	0		
Abstained:	0		
PROTOCOL NOTES:			
Review of Protocol:	The IBC Chair provided an overview of the protocol and opened		
Summary of Project(s):	discussion to the committee. Studying gene regulatory mechanisms by using two fungal		
Summary of Project(s).	model organisms, Candida albicans and Saccharomyces		
	cerevisiae to understand how gene expression is regulated		
	during cell and developmental biology.		
Changes to the Protocol:	Updated title and pathogen inventory, new Candida strains,		
	new gene targets, updated facilities, and updated containment from BSL-1 to BSL-2		
Risk Assessment Considerations:	HOIH BSL-1 to BSL-2		
Genetic Material:	Two new gene targets for cell regulation		
Vector system:	N/A		
,	New Candida strains, adding clinical and drug-resistant strains		
Microbiological agents:	from CDC collections.		
Organisms:	N/A		
Organisms: OTCC:	N/A N/A		
_	•		
OTCC:	N/A		
OTCC: Toxins:	N/A N/A		
OTCC: Toxins:  IRB protocol(s):	N/A N/A □Yes ☑No SROC protocol: □Yes ☑No		

	appropriate for the proposed containment level and work to be		
Safah Canaaria	conducted.		
Safety Concerns:	None		
Facility Concerns:	None		
Vaccine/Medical Surveillance:	None		
Administrative issues:		_	
Current safety training for staff:	No.		
Current equipment certification:	Yes.		
Date/Result of last EHS Survey:	Annual	Findings:	
Butter Result of fust Eris Survey.	4/16/2025	Cloth chairs present in lab	
	The committee had questions about whether facility changes		
	were needed for the change in containment from BSL-1 to BSL-		
	2. Assistant Biosafety Officer explained that PI is working in a		
	space designed for BSL-2 work but the previous approval was		
IBC Discussion:	for mutant <i>C. albicans</i> that had been considered RG1at its		
	original approval. Lab is updating documentation to reflect <i>C.</i>		
	albicans is currently RG2 and adding new clinical isolates that		
	also require BSL-2 containment.		
	aiso require Dol-2 containment.		

NuRamp ID:	103
Form ID:	26160
TITLE:	Nebraska Veterinary Diagnostic Center IBC
PI:	Dustin Loy
DEPT:	School of Veterinary Medicine and Biomedical Sciences
REVIEWED BY:	Full IBC Committee
Protocol Biosafety Level:	BSL-2, ABSL-2 (Animal)
NIH Guidelines reference:	III-F-1, III-F-2, III-E
IBC MOTION:	Approve as written.
Contingencies/Issues:	• None
Made by:	A. Mitra
Seconded by:	K. Heath
IBC ACTION:	Adopted by voice vote
For:	8
Against:	0
Abstained:	01
PROTOCOL NOTES:	
Deview of Drotocols	A Mitra provided an everyion of the protocol and enemed

i	ROTOCOL NOTES:			
	Review of Protocol:	A. Mitra provided an overview of the protocol and opened		
		discussion to the committee.		
	Summary of Project(s):	The mission of the Veterinary Diagnostic Center (VDC) is the		
		diagnosis, and/or surveillance and/or control of animal and		
		potentially zoonotic diseases important to the livestock		
		industries, animal health stakeholders, and citizens of the State		
		of Nebraska.		

Changes to the Protocol:	Added Bacillus anthracis Sterne (avirulent vaccine strain) as a control for PCR assay. Updated personnel. Condensed and clarified pathogen inventory. For clarity, potential pathogens that are tested for in samples were removed as agents and moved under RG-2 and RG-3 sample categories as they are not present in the lab. Updated prion disinfection section and clarified PPE.  New USDA permit attached.		
Risk Assessment Considerations:			
Genetic Material:	N/A		
Vector system:	N/A		
Microbiological agents:	Bacillus anthracis Ste	rne	
Organisms:	N/A		
OTCC:	N/A		
Toxins:	N/A		
IRB protocol(s):	□Yes ☑No <b>SR</b>	<b>OC protocol:</b> □Yes ☑No	
IACUC Protocol(s):	□Yes ☑No		
Facility/Safety Summary:  Safety Concerns: Facility Concerns:	The Committee reviewed the description of the facilities to be used and safety procedures and determined the facilities are appropriate for the proposed containment level and work to be conducted.  None  None		
Vaccine/Medical Surveillance:	None		
Administrative issues:  Current safety training for staff:  Current equipment certification:	Yes. Yes.		
Date/Result of last EHS Survey:	Annual	Findings:	
, , , , , , , , , , , , , , , , , , , ,	10/21/2024	All findings addressed.	
IBC Discussion:	Committee asked PI how the live inactivated spore vaccine made from the Sterne strain would be used as an assay control. PI explained that one of the targets for the <i>B. anthracis</i> PCR assay is the toxin gene, DNA isolated from the vaccine is the control; bacteria is not being propagated.		

## 3. Notice of NIH Exempt Protocol Approvals: None

## 4. Notice of Administratively Approved Amendments:

NuRamp ID:950Form ID:26179TITLE:Metabolomics Core Facility

_	_					
PI:		Sophie Alvarez				
	DEPT:	Center for Biotechnology				
	roject Biosafety Level:	BSL-2				
	IIH Guidelines reference:	III-F-8, C-I, C-VII				
P	ROTOCOL NOTES:					
	IRB protocol:	$\square$ Yes $\square$ No SROC protocol: $\square$ Yes $\square$ No				
	IACUC Protocol:	□Yes <b>☑</b> No				
	Objective of Study:	Core facility used to analyze proteins and metabolites from a wide				
		range of samples using mass spectrometry-based approaches.				
	Changes to the Protocol:	An additional sample preparation including a clean-up step for human				
		plasma and urine samples was included in section II.				
		Urine sample was added as a new sample to Section IV.				
		Specialized equipment for the SPE was added to Section IX.				
	Review comments:	None.				
	lu Damen ID.	1126				
	luRamp ID:	26156				
	orm ID:	Molecular characterization of common animal viral pathogens				
	ITLE:	Hiep Vu				
	l:	-				
	EPT:	Animal Science				
	roject Biosafety Level:	BSL-2, ABSL-2 (Animal) III-F-6, III-E, III-E-1, III-D-1-a, III-D-2-a, III-D-3-a, III-D-4-a, III-D-7				
NIH Guidelines reference:		111-1-0, 111-6, 111-6-1, 111-0-1-a, 111-0-2-a, 111-0-3-a, 111-0-4-a, 111-0-/				
_		2, , , 2, 2, 2,				
_	ROTOCOL NOTES:					
_	ROTOCOL NOTES:  IRB protocol:	□Yes ☑No SROC protocol: □Yes ☑No				
_	ROTOCOL NOTES:  IRB protocol:  IACUC Protocol:	□Yes ☑No SROC protocol: □Yes ☑No ☑Yes □No				
_	ROTOCOL NOTES:  IRB protocol:	☐Yes ☑No SROC protocol: ☐Yes ☑No ☑Yes ☐No ☐ To identify the mechanisms that viruses use to enter susceptible cells,				
_	ROTOCOL NOTES:  IRB protocol:  IACUC Protocol:	☐Yes ☑No SROC protocol: ☐Yes ☑No ☑Yes ☐No ☐ To identify the mechanisms that viruses use to enter susceptible cells, characterize animal immune responses to natural viral infection (or to				
_	ROTOCOL NOTES:  IRB protocol:  IACUC Protocol:	☐Yes ☑No SROC protocol: ☐Yes ☑No ☑Yes ☐No ☐Yes ☐No ☐ To identify the mechanisms that viruses use to enter susceptible cells, characterize animal immune responses to natural viral infection (or to vaccination), identify viral components capable of inducing immunity				
_	ROTOCOL NOTES:  IRB protocol:  IACUC Protocol:  Objective of Study:	☐Yes ☑No SROC protocol: ☐Yes ☑No ☑Yes ☐No ☐Yes ☐No ☐ To identify the mechanisms that viruses use to enter susceptible cells, characterize animal immune responses to natural viral infection (or to vaccination), identify viral components capable of inducing immunity and develop safe and effective vaccines against animal viruses.				
_	ROTOCOL NOTES:  IRB protocol:  IACUC Protocol:	☐Yes ☑No SROC protocol: ☐Yes ☑No ☑Yes ☐No ☐Yes ☐No  To identify the mechanisms that viruses use to enter susceptible cells, characterize animal immune responses to natural viral infection (or to vaccination), identify viral components capable of inducing immunity and develop safe and effective vaccines against animal viruses.  1. Update lab personnel				
_	ROTOCOL NOTES:  IRB protocol:  IACUC Protocol:  Objective of Study:	☐Yes ☑No SROC protocol: ☐Yes ☑No ☑Yes ☐No ☐Yes ☐No  To identify the mechanisms that viruses use to enter susceptible cells, characterize animal immune responses to natural viral infection (or to vaccination), identify viral components capable of inducing immunity and develop safe and effective vaccines against animal viruses.  1. Update lab personnel 2. Removed an animal study that will not be pursued.o				
_	ROTOCOL NOTES:  IRB protocol: IACUC Protocol: Objective of Study:  Changes to the Protocol:	☐Yes ☑No ☐Yes ☐No ☐Yes ☐No ☐To identify the mechanisms that viruses use to enter susceptible cells, characterize animal immune responses to natural viral infection (or to vaccination), identify viral components capable of inducing immunity and develop safe and effective vaccines against animal viruses.  1. Update lab personnel 2. Removed an animal study that will not be pursued.o 3. Edit the influenza virus inventory				
_	ROTOCOL NOTES:  IRB protocol:  IACUC Protocol:  Objective of Study:	☐Yes ☑No SROC protocol: ☐Yes ☑No ☑Yes ☐No ☐Yes ☐No  To identify the mechanisms that viruses use to enter susceptible cells, characterize animal immune responses to natural viral infection (or to vaccination), identify viral components capable of inducing immunity and develop safe and effective vaccines against animal viruses.  1. Update lab personnel 2. Removed an animal study that will not be pursued.o				
_	ROTOCOL NOTES:  IRB protocol: IACUC Protocol: Objective of Study:  Changes to the Protocol:	☐Yes ☑No ☐Yes ☐No ☐Yes ☐No ☐To identify the mechanisms that viruses use to enter susceptible cells, characterize animal immune responses to natural viral infection (or to vaccination), identify viral components capable of inducing immunity and develop safe and effective vaccines against animal viruses.  1. Update lab personnel 2. Removed an animal study that will not be pursued.o 3. Edit the influenza virus inventory				
P	ROTOCOL NOTES:  IRB protocol: IACUC Protocol: Objective of Study:  Changes to the Protocol:  Review comments:	☐Yes ☑No ☐Yes ☐No ☐Yes ☐No ☐To identify the mechanisms that viruses use to enter susceptible cells, characterize animal immune responses to natural viral infection (or to vaccination), identify viral components capable of inducing immunity and develop safe and effective vaccines against animal viruses.  1. Update lab personnel 2. Removed an animal study that will not be pursued.o 3. Edit the influenza virus inventory				
P	ROTOCOL NOTES:  IRB protocol: IACUC Protocol: Objective of Study:  Changes to the Protocol:	□Yes ☑No ☑Yes □No To identify the mechanisms that viruses use to enter susceptible cells, characterize animal immune responses to natural viral infection (or to vaccination), identify viral components capable of inducing immunity and develop safe and effective vaccines against animal viruses.  1. Update lab personnel 2. Removed an animal study that will not be pursued.o 3. Edit the influenza virus inventory None.				
N F	ROTOCOL NOTES:  IRB protocol: IACUC Protocol: Objective of Study:  Changes to the Protocol:  Review comments:	□Yes ☑No SROC protocol: □Yes ☑No ☑Yes □No  To identify the mechanisms that viruses use to enter susceptible cells, characterize animal immune responses to natural viral infection (or to vaccination), identify viral components capable of inducing immunity and develop safe and effective vaccines against animal viruses.  1. Update lab personnel 2. Removed an animal study that will not be pursued.o 3. Edit the influenza virus inventory  None.				
N F	ROTOCOL NOTES:  IRB protocol: IACUC Protocol: Objective of Study:  Changes to the Protocol:  Review comments:  IuRamp ID: orm ID:	□Yes ☑No ☑Yes □No To identify the mechanisms that viruses use to enter susceptible cells, characterize animal immune responses to natural viral infection (or to vaccination), identify viral components capable of inducing immunity and develop safe and effective vaccines against animal viruses.  1. Update lab personnel 2. Removed an animal study that will not be pursued.o 3. Edit the influenza virus inventory None.				
N F T P	ROTOCOL NOTES:  IRB protocol: IACUC Protocol: Objective of Study:  Changes to the Protocol:  Review comments:  IuRamp ID: orm ID: ITLE:	□Yes ☑No SROC protocol: □Yes ☑No ☑Yes □No □Yes □No  To identify the mechanisms that viruses use to enter susceptible cells, characterize animal immune responses to natural viral infection (or to vaccination), identify viral components capable of inducing immunity and develop safe and effective vaccines against animal viruses.  1. Update lab personnel 2. Removed an animal study that will not be pursued.o 3. Edit the influenza virus inventory  None.  1264 26140 Approaches to understand cell-cell signaling				
N F T P	ROTOCOL NOTES:  IRB protocol: IACUC Protocol: Objective of Study:  Changes to the Protocol:  Review comments:  IuRamp ID: orm ID: ITLE: II: DEPT:	□Yes ☑No ☑Yes □No To identify the mechanisms that viruses use to enter susceptible cells, characterize animal immune responses to natural viral infection (or to vaccination), identify viral components capable of inducing immunity and develop safe and effective vaccines against animal viruses.  1. Update lab personnel 2. Removed an animal study that will not be pursued.o 3. Edit the influenza virus inventory  None.  1264 26140 Approaches to understand cell-cell signaling James Checco				
N F T P D P	ROTOCOL NOTES:  IRB protocol: IACUC Protocol: Objective of Study:  Changes to the Protocol:  Review comments:  IuRamp ID: orm ID: ITLE: II:	□Yes ☑No SROC protocol: □Yes ☑No ☑Yes □No ☑Yes □No ☐ To identify the mechanisms that viruses use to enter susceptible cells, characterize animal immune responses to natural viral infection (or to vaccination), identify viral components capable of inducing immunity and develop safe and effective vaccines against animal viruses.  1. Update lab personnel 2. Removed an animal study that will not be pursued.o 3. Edit the influenza virus inventory  None.  1264 26140 Approaches to understand cell-cell signaling James Checco Chemistry				
N F T P D P	ROTOCOL NOTES:  IRB protocol: IACUC Protocol: Objective of Study:  Changes to the Protocol:  Review comments:  IuRamp ID: orm ID: ITLE: II: PEPT: Project Biosafety Level:	□Yes ☑No SROC protocol: □Yes ☑No ☑Yes □No  To identify the mechanisms that viruses use to enter susceptible cells, characterize animal immune responses to natural viral infection (or to vaccination), identify viral components capable of inducing immunity and develop safe and effective vaccines against animal viruses.  1. Update lab personnel 2. Removed an animal study that will not be pursued.o 3. Edit the influenza virus inventory  None.  1264 26140 Approaches to understand cell-cell signaling James Checco Chemistry BSL-2				

	IACUC Protocol:	<b>☑</b> Yes □No			
	Objective of Study:	Understand the chemical components and interactions that facilitate cell-to-cell communication. Taking model cell lines or various tissues			
		and extracting their chemical components for analysis, and studying			
		activation of cell surface receptors using biochemical assays.			
	Changes to the Protocol:	Updated gene list by adding excel file with gene list. New predicted			
	<b>G</b>	neuropeptide hormone receptors added.			
	Review comments:	None.			
N	uRamp ID:	19			
F	orm ID:	26130			
T	ITLE:	Gene regulation by dietary compounds			
Ρ	l <b>:</b>	Janos Zempleni			
D	EPT:	Nutrition and Health Sciences			
Ρ	roject Biosafety Level:	BSL-2, ABSL-2 (Animal),			
N	IH Guidelines reference:	III-F-3, III-F-8, C-I, C-VII, C-VIII, III-E, III-E-3, III-D-3-a, III-D-4-a, III-D-7			
P	ROTOCOL NOTES:				
	IRB protocol:	$\square$ Yes $\square$ No <b>SROC protocol:</b> $\square$ Yes $\square$ No			
	IACUC Protocol:	<b>☑</b> Yes □No			
	Objective of Study:	We study the bioavailability and tissues distribution of milk exosomes			
		in mice (and, in the future, humans). We are interested in milk			
		exosomes because of their roles in infant and adult nutrition, and			
		because of their promise for delivering therapeutic cargo to diseased			
		tissues.			
	Changes to the Protocol:	Section V. Added new information for mouse model			
		Section VI: Added new expression clone			
ı	Review comments:	None.			
N	uRamp ID:	615			
F	orm ID:	26127			
T	ITLE:	Metabolic Engineering and Synthetic Biology			
Ρ	l <b>:</b>	Wei Niu			
D	EPT:	Chemical and Biomolecular Engineering			
Ρ	roject Biosafety Level:	BSL-2			
N	IH Guidelines reference:	III-F-1, III-F-2, III-F-3, III-F-4, III-F-8, C-II, C-III, III-E, III-D-2-a			
P	ROTOCOL NOTES:				
	IRB protocol:	□Yes ☑No SROC protocol: □Yes ☑No			
	IACUC Protocol:	□Yes <b>☑</b> No			
	Objective of Study:	Research focuses on changing the metabolic traits of non-pathogenic			
		bacterial and yeast strains by deleting or inserting genetic materials			
		into the strain's genome. The modified strain is cultured and studied			
		for changes in metabolite secretion. The results guide the design of			

	subsequent genetic changes in order to optimize the strain's	
	performance in metabolite accumulation.	
Changes to the Protocol:	1. Updated personnel	
	2. Research Description. Added a section on yeast surface display for	
	protein engineering.	
	3. Recombinant Nucleic Acids. Added recombinant nucleic acids to the	
	vector list and the gene list.	
	4. Attachment. Added updated list of host, vector, and gene.	
Review comments:	None	

**Review comments:** 

#### **Notice of Minor Modification Forms Approved: 5**.

See attached report for a list of all Minor Modification forms received and approved since the last meeting.

#### **Notice of Protocol Annual Updates Received:** 6.

See the attached report for a list of all Annual Update forms received and approved since the last meeting.

#### **7. Notice of Protocol Terminations:**

NuRamp ID:	492				
TITLE:	Quantification of Biochemical Metabolites and Viral Nucleic Acids from Human or Research Animal Tissue Samples				
PI:	Jessica Calvi				
DEPT:	Athletics				
Project Biosafety Level:	BSL-2				
Project Termination Date:	8/27/2025				
PROTOCOL NOTES:					
IRB protocol(s):	✓Yes □No <b>SROC protocol:</b> □Yes ☑No				
IACUC Protocol(s):	□Yes <b>☑</b> No				
Disposition of rDNA and agents:	There are no materials currently with this protocol that need				
	destruction.				
NuRamp ID:	45				
TITLE:	Using E. coli to express DNA replication proteins				
TITLE: PI:	Using E. coli to express DNA replication proteins  Mark Griep				
PI:	Mark Griep				
PI: DEPT:	Mark Griep Chemistry				
PI: DEPT: Project Biosafety Level:	Mark Griep Chemistry BSL-1				
PI: DEPT: Project Biosafety Level: Project Termination Date:	Mark Griep Chemistry BSL-1				
PI: DEPT: Project Biosafety Level: Project Termination Date: PROTOCOL NOTES:	Mark Griep Chemistry BSL-1 8/14/2025				
PI: DEPT: Project Biosafety Level: Project Termination Date: PROTOCOL NOTES: IRB protocol(s):	Mark Griep Chemistry BSL-1 8/14/2025  □Yes ☑No SROC protocol: □Yes ☑No				

Fax: 402.472.9650

## C. Other Business:

- 1. EHS Report
- 2. Non-Compliance Reports

## II. ADJOURN

Motion: K. Heath

**2nd:** D. Loy

Time Adjourned: 3:11

# IBC Annual Update Form Approvals since last IBC Meeting

Form ID	Approval Date	IBC Project ID	Project Title	Protocol Status	Form Status	Lead PI	Amendment Needed
UNL-00026190	8/27/2025	UNL-00001327	Design and fabrication of electrochemical peptide-based MRSA sensors	Approved	Approved	Rebecca Lai	No
UNL-00026187	8/26/2025	UNL-00000434	Environmental fate of microorganisms originating from livestock production systems	Approved	Approved	Amy Schmidt	No
UNL-00026182	8/26/2025	UNL-00001308	Infection, Immunity and Detection of Livestock Pathogens.	Approved	Approved	Dustin Loy	No
UNL-00026181	8/26/2025	UNL-00001394	Fostering Student Success in STEM through Early Course-based Undergraduate Research Experiences in Biochemistry	Approved	Approved	Karin van Dijk	No
UNL-00026177	8/26/2025	UNL-00000117	Synthetic and Chemical Biology	Approved	Approved	Jiantao Guo	No
UNL-00026173	8/26/2025	UNL-00000092	Genetic Manipulation of Mycobacteria	Approved	Approved	Raul Barletta	No
UNL-00026172	8/21/2025	UNL-00000728	Carbon nanotube sensors for the detection of nitric oxide	Approved	Approved	Nicole Iverson	No
UNL-00026171	8/21/2025	UNL-00001122	Investigations into structure-function studies of metabolic enzymes, and copper-dependent regulation of cell proliferation signaling pathways	Approved	Approved	Jing Zhang	No
UNL-00026169	8/13/2025	UNL-00001367	Investigating the regulation of physiological metabolism and the pathogenic mechanism of metabolic diseases.	Approved	Approved	Tatsuya Yamada	No
UNL-00026165	8/15/2025	UNL-00001380	Production and storage of African Swine Fever Virus (ASFV) vaccine master seed.	Approved	Approved	Scott McVey	No
UNL-00026164	8/7/2025	UNL-00001238	Exosomes and substance use in rat models	Approved	Approved	Rick Bevins	No
UNL-00026161	8/25/2025	UNL-00000098	Characterization and Genetic Manipulation of Plant Bacterial Endophytes	Approved	Approved	Raul Barletta	No
UNL-00026159	8/26/2025	UNL-00000127	Transformation of Fusarium graminearum	Approved	Approved	Heather Hallen-Adams	No
UNL-00026158	8/7/2025	UNL-00000290	Research involving human gut yeasts, including Candida	Approved	Approved	Heather Hallen-Adams	No
UNL-00026152	8/7/2025	UNL-00001121	Examining the role of the healthy gastrointestinal microbiome in preventing infection with antibiotic resistant pathogens	Approved	Approved	Jennifer Auchtung	No
UNL-00026151	8/6/2025	UNL-00000978	Mechanobiology studies of human and animal cells	Approved	Approved	Ryan Pedrigi	No
UNL-00026149	8/6/2025	UNL-00000792	Studies of Host/Microbiome interactions in health and disease	Approved	Approved	Jacques Izard	No
UNL-00026148	8/6/2025	UNL-00000164	Genomic Analysis of Fecal Microbiomes From Humans, Poultry, and Canine	Approved	Approved	Andrew Benson	No
UNL-00026146	8/6/2025	UNL-00000940	Engineering of photosynthetic and anaerobic bacteria for bioproduct formation.	Approved	Approved	Rajib Saha	No
UNL-00026137	8/6/2025	UNL-00000564	Evolutionary and speciation genetics using Drosophila as a model system.	Approved	Approved	Colin Meiklejohn	No

9/2/2025

### Minor Modification Forms Approved since Last IBC Meeting

Form ID	IBC Project ID	Approval Date	ProjectTitle	Protocol Status	Form Status	Lead PI	Form Changes
UNL-	UNL-	8/27/2025 The	Impact of Cancer Treatment on Lymphatic Vessel Regeneration	Approved	Approved	Mohammad Razavi	Personnel
00001483	00001483	and	Remodeling				
UNL-	UNL-	8/27/2025 Infed	ctious Diseases Vaccine Development	Approved	Approved	Eric Weaver	Personnel
00000619	00000619						
UNL-	UNL-	8/13/2025 Opti	mized Molecular and RNAi-Based Approaches for Detecting	Approved	Approved	Leslie Rault	Personnel
00001350	00001350	Arth	ropod-Borne Pathogens and Silencing Target Transcripts in Insect	ts			
UNL-	UNL-	8/8/2025 Opti	mized Molecular and RNAi-Based Approaches for Detecting	Approved	Approved	Leslie Rault	Personnel
00001350	00001350	Arth	ropod-Borne Pathogens and Silencing Target Transcripts in Insect	ts			
UNL-	UNL-	8/8/2025 Und	erstanding the Cognitive and Brain Health in Relation to Diet and	Approved	Approved	Aron Keith Barbey	Personnel
00001450	00001450	Dieta	ary Interventions				

9/2/2025

## EHS/Biosafety Officer Report for IBC meeting on 9/8/2025

## **Biosafety Recurring Audits Since last meeting:**

BSL-2	BSL-1
Ramer-Tait (ABSL-2)	<ul> <li>Harveson, Robert</li> </ul>
	<ul> <li>Isom, Loren</li> </ul>
	<ul> <li>Yates, Dustin</li> </ul>

### **Pre-approval Audits:**

• None

## **BSL-3 Lab Updates**

- SA Registration updates
- Facility updates

## Post approval Monitoring since Last IBC meeting:

• None

**Other Activities:** (*Regulation updates, news, new/revised policies, etc.*)

• Helikar Lab update