IBC Meeting Minutes

Chair- Ken Bondioli
Research Safety- Abigail Fish
Monday, December 15, 2025
1:30 pm via Zoom

Institutions *Louisiana State University Agricultural and Mechanical College (A&M)*
Louisiana State University Ag Center

IBC Members			
	Ken Bondioli	LSU Ag Center	Chair, Animal Expert
	Abigail Fish	LSU A&M	BSO, Administrator, Voting Contact
	Sarah Keeton	LSU A&M	BSO
	Sue Hagius	LSU Ag Center	Animal Expert, Lab Rep
	Michael Hooks	LSU A&M	Member
	Jong Ham	LSU Ag Center	Plant Expert
	Christy White	Pennington Biomedical Research Center	Non-Voting Member
	Jeff Davis	LSU Ag Center	Plant and Insect Expert
	Niranjan Baisakh	LSU Ag Center	Plant Expert
	William Doerrler	LSU A&M	Member
	Ramanuj Lahiri	National Hansen's Disease Program	Member
	Rebecca Christofferson	LSU A&M	Member
	Michelle Dennis	Our Lady of the Lake Hospital	Local Non-Affiliated Member
	Brent Stanfield	LSU A&M	Member
	Ryoichi Teruyama	LSU A&M	Member

Members Present:	Ken Bondioli, Abigail Fish, Sarah Keeton, Sue Hagius, William Doerrler (proxy- Naohiro Kato; left at 2:45pm), Michael Hooks, Ryoichi Teruyama (arrived at 2:30 pm), Brent Stanfield (arrived at 1:38 pm) and Rebecca Christofferson	
Members Absent:	Christy White, Michelle Dennis, Jeff Davis, Niranjan Baisakh, and Ramanuj Lahiri	
Others Present:	Hailey Parry	Assistant Professor, Department of Kinesiology
	Tolupe Omelokan	Postdoctoral Researcher, Jean Chamcheu Lab, Department of Pathobiological Sciences
	Yong Hwan Lee	Associate Professor, Department of Biological Sciences
	Karuna Kharel	Assistant Professor, LSU Ag Center, School of Nutrition and Food Sciences
	Mario Rivera	Professor, Department of Chemistry

Call to Order: 1:34 pm

Approval of Minutes from: Meeting minutes from Tuesday, November 18, 2025

Motion Made by:	Sue Hagius
Seconded by:	Rebecca Christofferson
Abstaining:	None

Business and Call for New Business

No new business was discussed

New IBC Registrations and Amendments for Review

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
25064 (On Hold)	Hailey Parry	Kinesiology	12/2/2025	Investigating Mitochondrial Metabolism and Mitochondrial Lipid Droplet Interaction in Skeletal Muscle	Ryoichi Teruyama	Sarah Keeton

Project Overview:

This project investigates how the mitochondrial location within skeletal muscle fibers affects mitochondrial function, with a particular emphasis on mitochondria that interact with lipid droplets. Because mitochondria occupy distinct cellular microenvironments, their signaling activity may vary depending on proximity to lipid droplets and associated intracellular structures.

Commercially available Addgene plasmids (Mito-GA, LD-B, Hyper7, and TqFLITS) will be used as fluorescent biosensors to visualize mitochondrial–lipid droplet interactions and mitochondrial signaling activity. Mito-GA and LD-B fluoresce at sites of direct mitochondrial–lipid droplet contact, Hyper7 reports mitochondrial hydrogen peroxide production, and TqFLITS reports mitochondrial calcium levels. These plasmids are amplified without modification and do not integrate into nuclear or mitochondrial DNA.

Plasmid DNA is amplified in *Escherichia coli*, purified, and sequence-verified prior to use. Purified plasmids are injected into the flexor digitorum brevis muscle of mice solely to enable localized expression of biosensors in intact skeletal muscle fibers for downstream ex vivo imaging studies.

These studies will provide insight into how mitochondrial positioning and lipid droplet interactions regulate mitochondrial signaling in skeletal muscle cells. None of the plasmids used integrates into or modifies cellular or mitochondrial DNA.

Risk Assessment and Discussion:

This project presents a low biosafety risk and involves work with non-pathogenic *Escherichia coli* cloning strains, recombinant plasmid DNA encoding fluorescent biosensors, and mouse skeletal muscle tissue. All activities are conducted under BSL-1, ABSL-1, and BL1-N containment, as appropriate for the materials and procedures used.

Plasmid amplification is performed in *E. coli* strains commonly used for laboratory cloning and classified as Risk Group 1. The plasmids encode fluorescent sensors only and do not contain pathogenic sequences, toxins,

oncogenes, viral elements, or gene-drive components. The plasmids do not integrate into host genomes and are used solely for transient protein expression.

Animal work involves the localized intramuscular injection of purified plasmid DNA into mice, followed by the collection of skeletal muscle tissue. No infectious agents, viral vectors, or systemically bioactive materials are used, and no other tissues are exposed. Skeletal muscle fibers are isolated ex vivo for short-term live-cell imaging and electrical stimulation studies conducted under BL1-N conditions.

Primary hazards are limited to routine laboratory risks associated with bacterial culture, animal tissue handling, chemical reagents, and low-voltage electrical stimulation. These risks are mitigated through standard laboratory practices, the use of appropriate personal protective equipment, routine surface decontamination, and the proper disposal of biological and chemical waste.

With these measures in place, the work is considered appropriately contained within **BSL-1, ABSL-1, and BL1-N** environments, and no unusual risks to personnel, the environment, or public health are anticipated.

NIH Guidelines:	Section III-D-4-a.
Biosafety Level:	BSL-1, ABSL-1, and BL1-N
Training Requirements:	All personnel, including the PI, involved in this project must complete BSL-1 training in accordance with LSU's Environmental Health and Safety (EHS) and Institutional Biosafety Committee (IBC) requirements. In addition, all staff involved in animal procedures or husbandry must complete LSU's approved animal handling and species-specific training as required by the IACUC. All training must be completed before beginning work and refreshed as required by LSU policies and SOPs.
IBC Vote:	**Approved at BSL-1, ABSL-1, and BL1-N pending receipt of modifications**
	Motion made by: Sarah Keeton
	Seconded by: Sue Hagius
	Abstaining: None
	Conflicts of Interest: None

Requested Modifications:

- Section A. Project Information.
    - Locations. Please add School of VetMed to Buildings and remove Life Sciences if you are not using labs in this space. Please add vivarium room numbers.

    - Personnel. Training. Please have all lab personnel, including the PI, complete the EHS-required online BSL-1 safety training and list the courses under specific training.
- Section B. Project Description.
    - Procedures and Methods. Please indicate the room number for the -80 freezer. Please ensure that transport procedures specify the use of primary and secondary leakproof containment. Please clarify which vivarium you plan to use. The Life Science Vivarium is listed under Section A, Locations, but the SVM vivarium is listed here. Please state the room number where cell dishes will be discarded in sharps container.
- Section C. Risk Evaluation.
    - Biosecurity. Please indicate how liquid biohazardous waste is handled. Please also indicate how and where material from imaging at the SVM will be discarded.
- Section N. Safety.
    - Engineering Controls. BSC. Please change "no" to "yes" and complete the corresponding information for all BSCs that will be used.

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
25066 (On Hold)	Yong Hwan Lee	Biological Sciences	12/1/2025	Fructose-2, 6-Biphosphotase Decrease by Anaerobic Salmonella Variant YB-1, Mediated Expression and Delivery of Fructose-2, 6-BiPhosphotase and PFKKFB3-shRNA for Inhibition of Cancer Cell Growth in Tumor Microenvironments	Ryoichi Teruyama	Sue Hagius/ Abigail Fish

Project Overview:

This project studies the use of an attenuated *Salmonella enterica* serovar Typhimurium strain (YB1 variant of SL7207) engineered to express metabolic regulators that inhibit tumor growth. Plasmids encoding fructose-2,6-bisphosphatase and PFKFB3-targeting shRNA will be introduced into YB1 to enable expression within the tumor microenvironment.

B16F10 tumors will be established in C57BL/6 mice, followed by intravenous administration of the engineered YB1 strain. Tumor growth will be monitored over time, and animals will be euthanized for tumor collection once a defined reduction in tumor size is observed.

This work aims to evaluate the feasibility and biological effects of using metabolically engineered bacteria as a targeted approach to modulate tumor growth in a murine cancer model.

Risk Assessment and Discussion:	This project presents a moderate biosafety risk due to in vitro and in vivo work with a genetically modified *Salmonella enterica* serovar Typhimurium strain (YB1 variant of SL7207) and intravenous administration of live bacteria to tumor-bearing mice. Although the YB1 strain is derived from an attenuated background and engineered to function as an obligate anaerobe, it is still a live recombinant *Salmonella* strain and will be handled under BSL-2, BL2-N, and ABSL-2 containment to prevent accidental exposure and environmental release. All procedures involving bacterial culture, plasmid recombination, transformation, and preparation of inocula will be performed under BSL-2/BL2-N conditions, using appropriate engineering controls such as a certified biological safety cabinet for manipulations with potential aerosol generation. Animal procedures—including tumor induction with B16F10 cells, tail vein injection of YB1, and subsequent tumor collection—will be conducted under ABSL-2 practices**,** with appropriate containment measures in place during animal transport and handling. Primary hazards include accidental inoculation (e.g., needle sticks) during tail vein injection, exposure of skin or mucous membranes to live bacteria, aerosol generation during culture handling, and potential shedding or contamination from animals following bacterial administration. These risks are mitigated through layered containment measures, including engineering controls, appropriate PPE, controlled animal handling and transport, routine surface decontamination with effective disinfectants, and proper segregation and decontamination of biohazardous waste. With these measures in place, the work is considered appropriately contained within **BSL-2, BL2-N, and ABSL-2** environments, and no unusual environmental, public health, or security concerns are anticipated.
NIH Guidelines:	Section III-D-4-b
Biosafety Level:	BSL-1, BSL-2, ABSL-2, and BL2-N
Training Requirements:	All personnel, including the PI, involved in this project must complete BSL-2 training in accordance with LSU's Environmental Health and Safety (EHS) and Institutional Biosafety Committee (IBC) requirements. In addition, all staff involved in animal procedures or husbandry must complete LSU's approved animal handling and species-specific training as required by the IACUC. All training must be completed before beginning work and refreshed as required by LSU policies and SOPs.
IBC Vote:	**Approved at BSL-1, BSL-2, ABSL-2, and BL2-N pending receipt of modifications**
Motion made by:	Abigail Fish
Seconded by:	Sue Hagius
Abstaining:	Not applicable
Conflicts of Interest:	Not applicable

Requested Modifications:

- Section A. Project Information
  - Personnel. Training. Please have all lab personnel, including the PI, complete the EHS-required online BSL-2 safety training and list the courses under specific training.
- Section B. Project Description.
  - Project Goals. Please add a general summary of the work and update the listed project goals in layman's terms.
  - Procedures and Methods. Please ensure that procedures are written in layman's terms. Please add a statement briefly explaining what fructose-2,6-biphosphatase and PFKFB3-shRNA are and why they are important for this work. Please add a statement about the strain of Salmonella you plan to work with. Please indicate what work takes place in what lab and what is done inside a BSC, including animal work. Please also indicate what work takes place at BSL1 versus BSL2. Please briefly describe standard molecular biological techniques and indicate how you transform bacteria. Please briefly describe cell culture procedures. Please elaborate on the animal work, including a brief description of what is being done, where, and how. Please indicate approximately how many cancer cells and how many bacteria you plan to inject per mouse. Please indicate what you plan to do with the tumors that are excised at necropsy. Please also state if you plan to harvest any other tissue or blood from the animals. Please include a general statement on secure transport and the use of PPE in the lab and when working with animals.
- Section C. Risk Evaluation
  - Containment Level. Please uncheck ABSL-1 and BL1-N.
  - Biosafety. Please add a brief description of the Salmonella strain you will use for this work. Please describe what PPE is worn in the lab and what additional PPE is worn when working with animals. Please clarify the definition of "open containers" and describe the use of a BSC. Please move secure transport and waste management information to the Biosecurity section.
  - Biosecurity. Please add secure transport and waste management information here. Be sure to include how you inactivate liquid biological waste and indicate that after waste has been autoclaved, it is placed in a black trash bag before being discarded in regular waste. Please add the room number for the freezer. Please describe inventory management.
- Section D. Project Units.
  - Items 8 and 9. Please change "no" to "yes" and complete the corresponding sections.
- Section F. Recombinant DNA.
  - NIH Guidelines. Please update to Section III-D-4-b.
  - Specify Gene Product. Please indicate what protein will be expressed.
- Section N. Safety.
  - Disinfection/Decontamination. Please uncheck autoclave for animal carcasses. Please uncheck 10% bleach for solid waste and animal carcasses. Please uncheck 70% ethanol for solid and liquid waste. Please check incineration for animal carcasses. Please uncheck Stericycle for solid waste and animal carcasses.
  - Stock Cultures. Please indicate the room number where the freezer is located.

- Engineering Controls. BSC. Please update the BSC information. Either a or b should be marked as 'yes', while the other is marked as 'no'. Please add the certification date for the BSC and check yes to proper training for the BSC. Please update BSA to LSA. If you use a BSC in DLAM, please add an additional cabinet and complete the corresponding information.

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
25067	Karuna Kharel	Nutrition and Food Science	11/10/2025	Enhancing Antimicrobial Efficacy and Preventing Cross-Contamination in Agricultural Water: Synergy of Sanitizers and UV-C Treatment	Jong Ham	Michael Hooks

Project Overview:

This project evaluates the combined use of UV-C light and chemical sanitizers to improve microbial control in agricultural water and post-harvest produce wash systems. The study focuses on sodium hypochlorite and peroxyacetic acid (PAA), which are commonly used sanitizers in food and agricultural settings.

Experiments will assess the stability of sodium hypochlorite and PAA when used in combination with UV-C light under conditions that simulate extended run times typical of recirculated wash water and irrigation systems. The efficacy of low sanitizer concentrations combined with UV-C will be evaluated for their ability to reduce foodborne pathogens, including *Salmonella* spp., *Escherichia coli* O157:H7, *Listeria monocytogenes*, and non-pathogenic *E. coli*, across varying water turbidity levels.

The project will also examine whether a UV-C plus sanitizer wash system can reduce cross-contamination of *Salmonella* to cucumbers during post-harvest washing. Overall, this work aims to enhance the understanding of integrated UV-C and sanitizer treatments as a strategy to improve food safety in agricultural water and produce wash systems.

Risk Assessment and Discussion:

This project presents a moderate biosafety risk due to laboratory work with Risk Group 2 foodborne pathogens (*Salmonella enterica*, *Escherichia coli* O157:H7, and *Listeria monocytogenes*) and the use of UV-C irradiation and oxidizing chemical sanitizers (sodium hypochlorite and peroxyacetic acid) in bench-scale systems that simulate agricultural water and post-harvest wash conditions. All activities involving live pathogens will be conducted under BSL-2 containment.

All microbial procedures—including culture preparation, inoculum handling, water and produce inoculation, UV-C/sanitizer treatment, and microbial recovery—will be performed in designated BSL-2 laboratory areas. Handling of

pathogens, inoculated water, and inoculated produce will be conducted inside a certified biological safety cabinet. No recombinant DNA is used.

Primary hazards include aerosol or splash exposure, surface contamination, UV-C exposure to skin or eyes, and chemical hazards associated with sodium hypochlorite and peroxyacetic acid. These risks are mitigated through engineering controls, appropriate PPE, routine decontamination of work surfaces and equipment, sanitizer neutralization prior to analysis, and proper decontamination of all contaminated materials prior to disposal.

With these controls in place, the work is considered appropriately contained within **BSL-2** laboratory environments, and no unusual environmental or public health concerns are anticipated.

NIH Guidelines:	Not Applicable
Biosafety Level:	BSL-1 and BSL-2
Training Requirements:	All personnel, including the PI, involved in this project must complete BSL-2 training in accordance with LSU's Environmental Health and Safety (EHS) and Institutional Biosafety Committee (IBC) requirements. All training must be completed before beginning work and refreshed as required by LSU policies and SOPs.
IBC Vote:	**Approved at BSL-1 and BSL-2 pending receipt of modifications**
Motion made by:	Michael Hooks
Seconded by:	Abigail Fish
Abstaining:	None
Conflicts of Interest:	None

Requested Modifications:

Confidential - Not subject to NIH Guidelines

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
25068	Karuna Kharel	Nutrition and Food Science	11/10/2025	Ensuring Food Safety and Market Potential for Smoked and Canned Oysters from Louisiana's Coastal Fisheries	Michael Hooks	Jong Ham

Project Overview:

This project aims to improve the safety and market viability of smoked and canned oyster products by validating processing parameters that reduce the risk of *Clostridium botulinum*. Dry brining conditions will be evaluated to achieve target water phase salt and water activity levels known to inhibit *C. botulinum* growth in smoked oysters.

The study will also establish time–temperature processing conditions for canned oysters using *Clostridium sporogenes* as a non-toxigenic surrogate to assess spore inactivation under small-scale processing conditions. In parallel, consumer behavior, sensory perception, and product acceptance will be evaluated to better understand market potential for these products.

Findings from this work will be used to develop and disseminate best practices to support safe production methods, regulatory compliance, and expanded market opportunities for oyster processors.

Risk Assessment and Discussion:	This project presents a moderate biosafety risk due to food safety research involving spore-forming bacteria and pilot-scale processing of oyster products. *Clostridium sporogenes* is used as a non-toxigenic surrogate for *C. botulinum* in spore inactivation studies, which require careful containment due to the persistence of the spores. All work involving *C. sporogenes* will be conducted under **BSL-2 containment**. Primary hazards include potential exposure to spores during culture handling and processing, as well as contamination of surfaces or equipment. These risks are mitigated through standard laboratory controls, appropriate PPE, validated thermal processing conditions, and proper decontamination of all cultures, samples, and waste prior to disposal. Dry brining, smoking, and canning experiments involve routine chemical and physical hazards but do not introduce additional biological risk beyond standard food microbiology practices. Consumer sensory and behavioral studies pose no biosafety risk. With these measures in place, the work is considered appropriately contained, and no unusual risks to personnel, the environment, or public health are anticipated.
NIH Guidelines:	Not Applicable
Biosafety Level:	BSL-1 and BSL-2
Training Requirements:	All personnel, including the PI, involved in this project must complete BSL-2 training in accordance with LSU's Environmental Health and Safety (EHS) and Institutional Biosafety Committee (IBC) requirements. All training must be completed before beginning work and refreshed as required by LSU policies and SOPs.
IBC Vote:	**Approved at BSL-1 and BSL-2 pending receipt of modifications**
Motion made by:	Michael Hooks
Seconded by:	Abigail Fish
Abstaining:	None
Conflicts of Interest:	None

Requested Modifications:

Confidential - Not subject to NIH Guidelines

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
25069	Jean Christopher Chamcheu	Pathobiological Sciences	11/18/2025	Testing the Efficacy of VSV, VC2, and VC2-G Mediated Oncolytic Viral Therapy in Skin Inflammation (Psoriasis/Atopic Dermatitis)	Brent Stanfield	Rebecca Christofferson

Project Overview: Due to insufficient information in the initial submission, the registration was returned to the PI for additional detail and revision before proceeding to full committee review.

Risk Assessment and Discussion: The IBC determined that the application did not contain sufficient information to complete a risk assessment; therefore, the registration has been placed "on hold" pending receipt of additional details.

NIH Guidelines: To be determined
Biosafety Level: To be determined
Training Requirements: To be determined

IBC Vote: **No motion was made. The protocol was placed "ON HOLD".**

Motion made by: None

Seconded by:	None
Abstaining:	None
Conflicts of Interest:	None

Requested Modifications:

- Section A. Project Goals.
  - Project Title. Please update the title to provide clarity on the names of the viral vaccine candidates used in this work.
  - Locations. Please add 'Vet Med' to buildings and include room numbers for the lab, flow cytometry room, and DLAM.
  - Personnel. Training. Please have all lab personnel, including the PI, complete the EHS-required online BSL-2 safety training and list the courses under specific training. Please complete experience related to the project for Joy fOlehan.
- Section B. Project Description.
  - Project Goals. Please update project goals to include a broad overview of the work and objects written in layman's terms. Please be sure to define VSV, VC-2, and VC2-GMCSF and spell out all acronyms the first time you use them.
  - Procedures and Methods. Please indicate what work takes place in what room and indicate what is done inside a BSC. Please briefly describe all work associated with this project, including viral culture, histopathological analysis, evaluation of cell proliferation and visualization, flow cytometry, fluorescence-based quantification, cytokine expression profiles, and any other additional procedures, including processing tissue samples from necropsy. Please reference the approved IBC protocol for recombinant DNA work. Please describe what samples are collected at necropsy and indicate any downstream processing not currently described here. For all procedures, please indicate how potentially infectious materials are inactivated and at what step in the process. Please also include a general PPE and secure transport statement. Please describe appropriate biosafety conditions.
- Section C. Risk Evaluation.
  - Containment Level. Please check BL2-N.
  - Biosafety. Please indicate what PPE is worn in the lab and what additional PPE is required for animal work. Please move waste disposal information to the biosecurity section.
  - Biosecurity. Please update waste disposal information to reflect VetMed practices. Please state that potentially infectious material will be transported via primary and secondary leakproof containment.
- Section D. Project Units.
  - Item 11. Please change no to yes and complete the corresponding section.
- Section F. Recombinant DNA.
  - Please ensure this section agrees with the IBC previously approved for rDNA work.
  - NIH Guidelines. Please update to Section III-D-4-b. DNA/RNA Insertions. Please change yes to no. Coding sequences. Please update the coding sequences to match the species and gene names. Genes expressed in what organisms. Please change to Vero cells.
- Section N. Safety.

- Disinfection/Decontamination. Please uncheck autoclave for solid waste. Please uncheck 70% ethanol for liquid waste. Please check Stericycle for solid waste. Engineering Controls. BSC. Please add BSC information for all BSCs that will be used, including the ones in DLAM.

- Section O. Medical Surveillance.
  - If you will be working with human or primate cells you are required to take bloodborne pathogens training. Please update this question accordingly.

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
25070	Jean Christpher Chamcheu	Pathobiological Sciences	11/18/2025	Testing the Efficacy of Natural Product Extracts and Their Phytochemicals to Enhance VSV, VC2, and VC2-G Mediated Oncolytic Therapy for Skin and Breast Cancer	Rebecca Christofferson	Brent Stanfield

Project Overview: Due to insufficient information in the initial submission, the registration was returned to the PI for additional detail and revision before proceeding to full committee review.

Risk Assessment and Discussion: The IBC determined that the application did not contain sufficient information to complete a risk assessment; therefore, the registration has been placed "on hold" pending receipt of additional details.

NIH Guidelines: To be determined
Biosafety Level: To be determined
Training Requirements: To be determined

IBC Vote: **No motion was made. The protocol was placed "ON HOLD".**

Motion made by: Not applicable
Seconded by: Not applicable
Abstaining: Not applicable
Conflicts of Interest: Not applicable

Requested Modifications:

- Section A. Project Information.

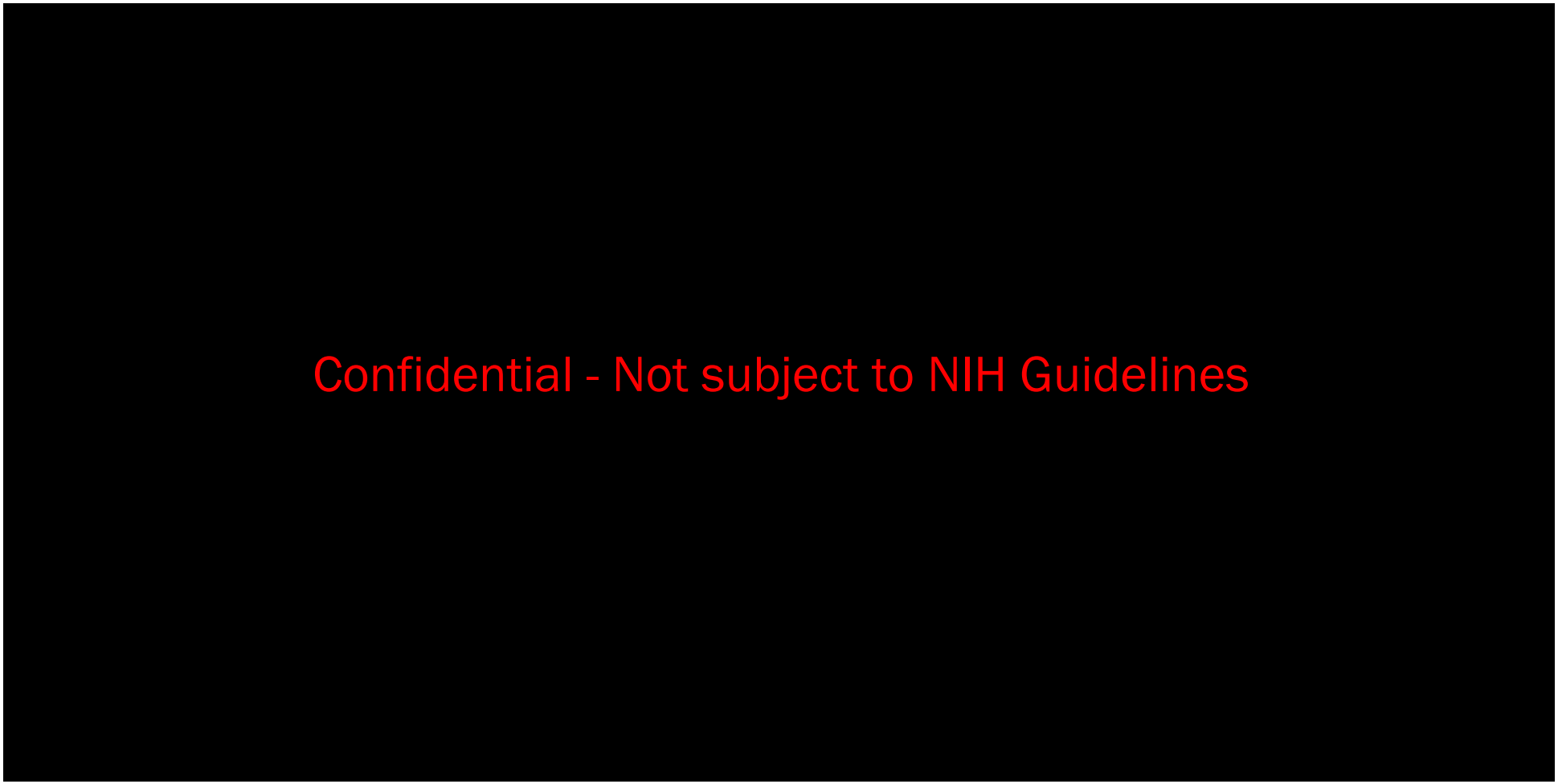
    - Project Title. Please update the title to provide clarity on the names of the viral vaccine candidates used in this work.
    - Locations. Please update buildings or facilities where work will be conducted and provide all room numbers including DLAM.
    - Personnel. Training. Please have all lab personnel, including the PI, complete the EHS-required online BSL-2 safety training and list the courses under specific training.
- Section B. Project Description.
    - Project Goals. Please update project goals to include a broad overview of the work and objects written in layman's terms. Please be sure to define VSV, VC-2, and VC2-GMCSF.
    - Procedures and Methods. Please indicate what work takes place in what lab, and what is done inside a BSC. Please briefly describe all work associated with this project, including virus and cell culture, immunoassays, procedures, and processing tissue samples from necropsy, etc. Please reference the approved IBC protocol for recombinant DNA work. Please describe what samples are collected at necropsy and indicate any downstream processing not currently described here. For all procedures, please indicate how potentially infectious materials are inactivated and specify the step in the process at which this occurs. Please also include a general PPE and secure transport statement. Please describe appropriate biosafety conditions. Please spell out G. kola. Please remove the statement "furthermore, our preliminary data… oncolytic viruses." Please consult with EHS for a chemical handling procedure for the use of Vemurafenib.
- Section C. Risk Evaluation.
    - Containment Level. Please check BSL-2 and BL2-N.
    - Biosecurity. Please update waste disposal information to reflect VetMed practices. lease state that potentially infectious material will be transported via primary and secondary leakproof containment.
- Section F. Recombinant DNA.
    - Please ensure this section agrees with the IBC previously approved for rDNA work.
    - NIH Guidelines. Please update to Section III-D-4-b. DNA/RNA Insertions. Please change yes to no. Coding sequences. Please update the coding sequences to match the species and gene names. Genes expressed in what organisms. Please change to Vero cells.
- Section J. Human Pathogens.
    - Routes of Infection. Please check aerosol and bloodborne.
- Section K. Animal Pathogens.
    - Will animals be infected in this study. Please change no to yes. Usual routes of infection. Please check mucosal, aerosol, and bloodborne. Collaborator. Please indicate the collaborator's university of origin.
- Section M. Human or Primate Blood, Body Fluids, or Tissues.
    - Containment, Disposal, and Destruction Measures. Please update waste disposal procedures to reflect VetMed practices.
- Section N. Safety.
    - Sharps. Please change 'no' to 'yes' for pipettes. Disinfection/Decontamination. Please uncheck the autoclave option for liquid waste and select 10% bleach instead. Please check Stericycle for solid waste. Engineering Controls. BSC. Please add BSC information for all BSCs that will be used, including the ones in DLAM. Other Safety Equipment. Please check safety shower.
- Section O. Medical Surveillance.
    - Since you will be working with human or primate cells, you are required to take bloodborne pathogens training. Please update this question accordingly.

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
25071 (Renewal)	Guillaume Spielmann	Kinesiology	11/20/2025	Impact of Resting, Sub-Maximal and Maximal Cardiorespiratory Exercise Capacity on Body Fluids, Biochemistry, Mitochondrial Oxidative Capacity, Cardiovascular Function, and Immune Response	Sue Hagius	Abigail Fish

Project Overview:	The purpose of this proposal is to evaluate the impact of acute bouts of maximal and/or submaximal exercise on cardiovascular function, muscle and immune cell mitochondrial function, and changes in electrolyte concentrations in sweat and serum. This proposal will also evaluate the impact of exercise on immune cell distribution and function. Additionally, the purpose of this proposal is to train and evaluate the performance of personnel and determine the feasibility of new testing protocols.
Risk Assessment and Discussion:	This project presents a low to moderate biosafety risk due to the collection and laboratory handling of human-derived specimens (blood, saliva, and occasional skeletal muscle biopsy tissue) and downstream processing of primary human immune and muscle cells. Because human samples may contain bloodborne pathogens, all materials will be handled using BSL-2 practices and treated as potentially infectious. Blood, saliva, and tissue samples will be transported in sealed secondary containment and handled using aseptic technique, with all open manipulations (PBMC isolation, cell sorting, mitochondrial assays, and primary cell culture) conducted in a biosafety cabinet. Primary hazards include sharps injuries during blood collection, splashes or aerosol exposure during centrifugation and pipetting, and surface contamination. These risks are mitigated through the use of safety-engineered needles, careful centrifugation and pipetting practices, the use of a biosafety cabinet, and routine decontamination of surfaces and equipment. With these controls in place, the work is considered appropriately contained within **BSL-2** laboratory environments, and no unusual risks to personnel, the environment, or public health are anticipated.
NIH Guidelines:	Not Applicable
Biosafety Level:	BSL-2
Training Requirements:	All personnel, including the PI, involved in this project must complete BSL-2 training in accordance with LSU's Environmental Health and Safety (EHS) and Institutional Biosafety Committee (IBC) requirements. All training must be completed before beginning work and refreshed as required by LSU policies and SOPs.

IBC Vote:	**Approved at BSL-2 pending receipt of modifications**	
	Motion made by:	Sue Hagius
	Seconded by:	Abigail Fish
	Abstaining:	None
	Conflicts of Interest:	None

Requested Modifications:



Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
25072 (Renewal)	Alyssa Johnson	Biological Sciences	10/21/2025	Using Multiple Animal Models to Assess Potential Pro-Longevity Capabilities of Tubular Lysosomes	Sarah Keeton	Sue Hagius/ Abigail Fish

Project Overview:

This project investigates whether overexpression of the microprotein SVIP can promote longevity and improve healthspan in the model organisms *Caenorhabditis elegans* and *Drosophila melanogaster*. SVIP is a small lysosomal protein that recruits the ATPase VCP to lysosomes, where they help regulate cellular recycling and maintenance processes that decline with age.

In simple terms, this work examines whether increasing a protein involved in cellular "cleanup" and recycling helps cells remain healthier for longer, potentially extending lifespan. By improving how cells remove damaged components, SVIP overexpression may support better function over time.

Longevity will be assessed by comparing the average lifespans of control and SVIP-overexpressing animals, with survival monitored every 2–3 days, and the mean lifespan calculated for each population. In addition to lifespan, measures of healthspan will be evaluated, including mobility, autophagy turnover, and lysosomal activity using established fluorescent reporter systems.

Together, these studies aim to determine whether tissue-specific SVIP overexpression enhances lifespan and cellular health in invertebrate models of aging.

Risk Assessment and Discussion:

This project presents a low biosafety risk and involves laboratory work with the invertebrate model organisms *Caenorhabditis elegans* and *Drosophila melanogaster*, along with genetic overexpression of the microprotein SVIP using established genetic tools. Both organisms are Risk Group 1, non-pathogenic, and widely used in laboratory research.

Experimental procedures include routine maintenance of worm and fly colonies, genetic manipulation to drive tissue-specific SVIP overexpression, lifespan monitoring, and assessment of healthspan metrics using fluorescent reporters. These activities do not involve infectious agents, toxins, or vertebrate animals. No human materials are used.

Primary hazards are limited to standard laboratory risks, including handling of small organisms, use of microscopy and fluorescent imaging, and routine chemical reagents associated with staining or imaging. These risks are

	mitigated through standard laboratory practices, appropriate personal protective equipment, and proper disposal of biological and chemical waste. With these measures in place, the work is considered appropriately contained within BSL-1 laboratory environments, and no unusual risks to personnel, the environment, or public health are anticipated.
NIH Guidelines:	Section III-D-4-a
Biosafety Level:	BSL-1, BL1-N, and ACL-1
Training Requirements:	All personnel, including the PI, involved in this project must complete BSL-1 training in accordance with LSU's Environmental Health and Safety (EHS) and Institutional Biosafety Committee (IBC) requirements. All training must be completed before beginning work and refreshed as required by LSU policies and SOPs.
IBC Vote:	**Approved at BSL-1, BL1-N, and ACL-1 pending receipt of modifications**
	Motion made by: Sarah Keeton
	Seconded by: Abigail Fish
	Abstaining: None
	Conflicts of Interest: None

Requested Modifications:

- Section A. Project Information.
  - Locations. Please add LSB common equipment room number.
  - Personnel. Training. Please ensure all lab personnel, including the PI, complete the EHS-required online BSL-1 safety training and that all courses are listed under specific training.
- Section B. Project Description.
  - Project Goals. Please expand the project goals section to include an overall summary of the work that is being done in layman's terms. Please include a brief description of small VCP interaction protein and indicate how you test longevity. Please also indicate what organisms are used for what objective.
  - Procedures and Methods. Please indicate what work takes place in what room. Please expand on SVIP. The function and significance of this protein remain unclear. Please provide a brief description of the Gateway cloning system and UV irradiation to integrate endogenous chromosomes. Please briefly describe "analyzed for various cell and behavioral phenotypes." Please clarify what UV integration means. Please remove the sentence "Aim 2 will not require the use of recombinant DNA"—transgenic flies are recombinant DNA. Please expand on work with transgenic flies, including containment procedures and "behavioral assays and microscopy. The committee requests a copy of lab-specific SOPs rather than the current attachment.
- Section C. Risk Evaluation.
  - Containment Level. Please check ACL-1.
  - Biosafety. Please describe the safety measures used for work with UV light.

- Biosecurity. Please describe handling of biohazardous liquid waste and solid waste post autoclave. Please also describe how transgenic flies and nematodes are handled. Please add room numbers for freezers and incubators.

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
25057 (Renewal)	Mario Rivera	Chemistry	11/26/2025	Small Molecules for Perturbing Iron Homeostasis in Bacterial Biofilms	Sarah Keeton	Abigail Fish

Project Overview:

This project investigates a novel strategy for disrupting iron storage and utilization in the bacterial pathogens *Pseudomonas aeruginosa* and *Acinetobacter baumannii*. Both organisms are opportunistic, antibiotic-resistant pathogens that rely on tightly regulated iron metabolism for growth, survival, and virulence.

The study will focus on the BfrB–Bfd protein complex, which plays a key role in bacterial iron mobilization. Researchers will develop and test small-molecule probes designed to block this complex in vitro and in bacterial cultures. Genetic and chemical approaches will be used to evaluate the biological consequences of inhibiting BfrB–Bfd function, including effects on bacterial growth and physiology.

Finally, the project will assess whether disrupting the BfrB–Bfd complex alters bacterial susceptibility to existing antibiotics. These experiments will be performed in both planktonic and biofilm cultures and will compare the effects of antibiotics alone, small-molecule inhibitors alone, and combination treatments.

Overall, this work aims to improve understanding of bacterial iron metabolism and to evaluate whether targeting the BfrB–Bfd complex could enhance antibiotic effectiveness against clinically relevant, drug-resistant pathogens.

Risk Assessment and Discussion:

This project presents a moderate biosafety risk due to laboratory work with multiple Risk Group 2 bacterial species, including *Pseudomonas aeruginosa*, *Acinetobacter baumannii*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Escherichia coli*, *Staphylococcus aureus*, and *Shigella flexneri*. These organisms are associated with human disease and require BSL-2 containment to prevent accidental exposure.

All work with live cultures—including planktonic and biofilm growth, genetic and chemical perturbations, and antibiotic susceptibility testing—will be conducted under BSL-2 conditions. Aerosol-generating procedures will be performed in a certified biological safety cabinet. Primary hazards include accidental skin or mucous membrane

exposure, aerosol generation, and surface contamination. Risks are mitigated through engineering controls, appropriate PPE, routine surface decontamination, and autoclaving of biological waste.

With these controls in place, the work is considered appropriately contained within BSL-2 laboratory environments, and no unusual environmental or public health concerns are anticipated.

NIH Guidelines:	Section III-D-2-a
Biosafety Level:	BSL-2
Training Requirements:	All personnel, including the PI, involved in this project must complete BSL-2 training in accordance with LSU's Environmental Health and Safety (EHS) and Institutional Biosafety Committee (IBC) requirements. All training must be completed before beginning work and refreshed as required by LSU policies and SOPs.
IBC Vote:	**Approved at BSL-2 pending receipt of modifications**
Motion made by:	Sarah Keeton
Seconded by:	Abigail Fish
Abstaining:	None
Conflicts of Interest:	None

Requested Modifications:

- Section A. Project Information.
  - Personnel. Training. Please ensure all lab personnel, including the PI, complete the EHS-required online BSL2 safety training and that all courses are listed under specific training.
- Section B. Project Description.
  - Project Goals. Please include an overall project summary in layman's terms, including a brief description of the BfrB-Bfd complex.
  - Procedures and Methods. Please include a sentence indicating a comprehensive list of bacteria that you plan to work with is attached and can be found under Section J. and Section K. Please indicate what the bfrB and bfd genes do and why they are important.
- Section C. Risk Evaluation.
  - Biosafety. Please indicate that safety glasses are used as required by the work.
  - Biosecurity. Please note that autoclave waste is placed in black trash bags and disposed of as regular waste in the dumpster.
- Section J. Human Pathogens
  - Usual Routes of Infection. Please check mucosal and aerosol.
- Section K. Animal Pathogens.
  - Usual Routes of Infection. Please check mucosal and aerosol.
  - Please change "no" to "yes" to drug resistance.
  - Please check centrifugation for concentrating the pathogen.

Upcoming Meetings: January 15, 2026 @1:30 pm via Zoom

Adjourned: 3:18 pm