

IBC Meeting Minutes

Chair- Ken Bondioli

Research Safety- Abigail Fish

Thursday, March 13, 2026

1:30 pm via Zoom

Institutions

Louisiana State University Agricultural and Mechanical College (A&M)

Louisiana State University Ag Center

<i>IBC Members</i>			
	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
	James Bush	Blue Cross Blue Shield of Louisiana	Local Non-Affiliated Member

Members Present: Ken Bondioli, Abigail Fish, Sarah Keeton, Sue Hagius, Michelle Dennis, Michael Hooks, Ryoichi Teruyama, Brent Stanfield, Ramanuj Lahiri, and James Bush.

Members Absent: Christy White, William Doerrler, Jeff Davis, Niranjana Baisakh, Rebecca Christofferson, and Jong Ham.

Others Present:	Tolulope Omolekan	Post-Doctoral Researcher, Chamcheu Lab, Department of Pathobiological Sciences
	William Moe	Marvin Rex Clemmons Professor, Department of Civil and Environmental Engineering
	Craig Hart	Professor, Department of Biological Sciences
	Jean Chamcheu	Associate Professor, Department of Pathobiological Sciences
	Come Thieulent	Assistant Professor, Department of Pathobiological Sciences
	Tomislav Jelesijevic	Assistant Professor, Department of Comparative Biomedical Sciences

Call to Order: 1:35 pm

Approval of Minutes from: February 12, 2026

Motion Made by:	Ramanuj Lahiri
Seconded by:	Sarah Keeton
Abstaining:	James Bush and Michelle Dennis

Business and Call for New Business

No new business to report

New IBC Registrations and Amendments for Review

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
26008	Victoria Coutts	Biological Sciences	02/11/2026	Impacts of Ectoparasites on Parental Feeding Behavior and Offspring Microbiome in Wild Songbirds	Michelle Dennis	Sue Hagius

Project Overview:

This project aims to understand how increasing levels of mites in nest boxes affect the behavior of parent birds, particularly cavity-nesting species such as bluebirds. As mite infestations have become more common, they are associated with decreased chick survival and overall bird health. This research will examine how parent birds respond to these environmental pressures and whether they adjust their behavior to protect and care for their offspring. The findings will help improve our understanding of how native bird populations cope with parasite stress and may inform future conservation and management strategies to support their survival.

Risk Assessment and Discussion:

Additional information is required to complete a thorough risk assessment

NIH Guidelines:

Not Applicable.

Biosafety Level:

To Be Determined

Training Requirements:

To Be Determined

IBC Vote:

This protocol was placed “on hold” until additional information is provided.

Motion made by:

Seconded by:

Abstaining:

Conflicts of Interest:

Requested Modifications:

Confidential - Not subject to NIH Guidelines

Confidential - Not subject to NIH Guidelines

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
26009	Tomislav Jelesijevic	Comparative Biomedical Sciences	02/16/2026	Investigating Outcomes of Respiratory Infections to Inhalation Pollutants (e.g., E-Cigarettes and Tobacco)	Brent Stanfield	Rebecca Christofferson

Project Overview: This project focuses on the preparation and characterization of low-pathogenic influenza virus stocks for use in controlled research applications. The work includes generating virus stocks, quantifying viral concentrations, and standardizing stock levels to ensure consistency across experiments. Viral concentrations may be adjusted based on strain-specific characteristics to support downstream studies. Overall, this research supports a better understanding of influenza virus behavior and enables reliable use of these materials in laboratory investigations.

Risk Assessment and Discussion: This project presents a moderate biosafety risk consistent with laboratory work involving low-pathogenic influenza virus. The research involves generating, quantifying, and standardizing viral stocks to support controlled experimental use. Viral concentrations may be adjusted based on strain-specific characteristics to ensure consistency across studies.

Potential hazards include handling infectious viral material and performing laboratory procedures that may generate aerosols or involve higher viral concentrations. These risks are effectively managed under Biosafety Level 2 (BSL-2) practices, including appropriate personal protective equipment (PPE), use of a biological safety cabinet for aerosol-generating procedures, routine decontamination of work surfaces, and proper handling and disposal of biohazardous materials.

With these precautions in place, the project is considered moderate risk but appropriately contained under standard BSL-2 practices. No environmental or security concerns 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: Brent Stanfield

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
26010	Come Thieulent	Pathobiological Sciences	02/24/2026	Role of Bovine Leukemia Virus in Breast Cancer	Rebecca Christofferson	Michael Hooks

Project Overview: This project aims to investigate the potential role of Bovine Leukemia Virus (BLV) in human breast cancer and assess whether it may represent a preventable viral risk factor. The research will examine the presence and characteristics of BLV infection in human breast tissue and mammary epithelial cells. In addition, the study will evaluate how BLV infection may influence cellular behavior, including changes in gene expression and early cellular features associated with cancer development. Overall, this work seeks to improve the understanding of possible viral contributions to breast cancer and inform future prevention strategies.

Risk Assessment and Discussion: This project presents a moderate biosafety risk consistent with research evaluating the potential role of Bovine Leukemia Virus (BLV) in breast cancer using in vitro and in vivo models. The work includes characterization of BLV infection in human breast tissues and mammary epithelial cells, as well as assessment of BLV-associated changes in gene expression and early pro-oncogenic phenotypes.

Potential hazards include handling infectious or BLV-associated materials, human-derived tissues and cells, and conducting laboratory and animal procedures that may involve exposure through sharps, mucous membranes, or aerosol-generating activities. These risks are effectively managed under Biosafety Level 2 (BSL-2), Animal Biosafety Level 2 (ABSL-2), and BL2-N practices, including appropriate PPE, use of a biological safety cabinet, routine decontamination, controlled animal handling, and proper disposal of biohazardous materials.

With these precautions in place, the project is considered moderate risk but appropriately contained under standard BSL-2, ABSL-2, and BL2-N practices. No environmental or security concerns are anticipated.

NIH Guidelines: Section III-D-1-a
Section III-D-4-b

Biosafety Level: 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-2, ABSL-2, and BL2-N pending receipt of modifications**

Motion made by: Michael Hooks

Seconded by: Abigail Fish

Abstaining: None

Conflicts of Interest: None

Requested Modifications:

- Section A. Project Information
 - Locations. Please remove all room numbers not associated with the project, including cell-sorting rooms and ensure pertinent lab numbers are listed here.
 - Personnel. Please list EHS-specific training under specific training for all personnel and the PI.
- Section B. Project Description.
 - Procedures and Methods. Please indicate what work takes place inside the BSC and in what lab. Please briefly describe all procedures, including cell and viral culture, molecular and histological analysis, immunofluorescence, flow cytometry, and DNA/RNA work. Please indicate when potentially infectious material is inactivated. Please elaborate on the animal work associated with this work and indicate downstream assays with stably transfected cell lines. EIAV is indicated under procedures, please clarify if this virus is applicable to this work. Please clarify if live cell sorting will be a part of this project. Please indicate where HMECs are obtained and the relevant IRB number. Please indicate which established breast cancer cell lines you plan to use. Please state that BL3.1 is Bovine leukemia virus strain BL3.1. Please describe how recombinant BLV is generated. Please describe the tax protein and indicate what generation of lentiviral vector you plan to work with. Please state what tissues and/or blood are collected during animal work and downstream processing.
- Section C. Risk Evaluation
 - Containment Level. Please check BL1-N.
 - Biosafety. Please update the required PPE and remove N95s if not applicable to this work.
 - Biosecurity. Please specify which disinfectant you use to decontaminate liquid waste and the appropriate contact time. Please remove any mention of shipping and bovine blood if they are not applicable to this project.
- Section D. Project Units.
 - Please indicate that IACUC is pending submission.
- Section F. Recombinant DNA.
 - NIH Guidelines. Please add Section III-D-4-b.
 - DNA/RNA Inserts. Please change yes to no.
- Section J and K. Human and Animal Pathogens.
 - Please change no to yes for stock cultures.
- Section M. Human/Primate Blood, Body Fluids, and Tissue.
 - Please check primary culture.
 - Cells/Tissues. Please add HEK293 Cells.
 - Source of cells. Please indicate which cells the collaborator provides and the individuals institution.
- Section N. Safety.
 - Disinfection/Decontamination. Please check incineration for animal carcasses.

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
26011	Craig Hart	Biological Sciences	03/02/2026	Analyzing the Role of a Chromatin Domain Insulator Binding Protein in Promoter and Insulator Function	Sarah Keeton	Ryoichi Teruyama

Project Overview:

This project aims to better understand how the organization of DNA within the nucleus influences gene regulation. Specifically, the research focuses on chromatin boundary elements, which help divide the genome into functional domains that control how genes are turned on or off. Using the *Drosophila* Boundary Element-Associated Factor (BEAF) as a model system, the study will examine how these boundary elements function at gene promoter regions, particularly in genes that are consistently active (housekeeping genes).

The research will investigate how BEAF interacts with other proteins to regulate gene activity, how it communicates with distant regulatory elements, and how these interactions contribute to overall gene expression patterns. This work will provide insight into the molecular mechanisms linking genome organization to gene regulation and will improve understanding of fundamental cellular processes.

Risk Assessment and Discussion:

This project presents a low biosafety risk consistent with molecular and cellular biology research using non-pathogenic model systems. The work focuses on chromatin organization and gene regulation using *Drosophila*-derived proteins and standard molecular biology approaches. No infectious agents associated with human disease are utilized.

Potential hazards are minimal and limited to routine laboratory procedures, including handling recombinant DNA constructs, cultured cells, and standard laboratory reagents, with minor risks such as accidental exposure or sharp-related injury. These risks are effectively managed under Biosafety Level 1 (BSL-1) practices, including standard microbiological techniques, appropriate PPE, and routine decontamination.

With these precautions in place, the project is considered low risk and appropriately contained under standard BSL-1 practices. No environmental or security concerns are anticipated.

**NIH Guidelines:
Biosafety Level:**

Section III-E-1 and Section III-F-8, Appendix C
BSL-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 pending receipt of modifications**

Motion made by: Sarah Keeton

Seconded by: Ryoichi Teruyama

Abstaining: None

Conflicts of Interest: None

Requested Modifications:

- Section A. Project Information
 - Personnel. Please list EHS-specific training under the PI's specific training. As personnel are added to the project, please add them as amendments and include pertinent information.
- Section B. Project Description.
 - Procedures and Methods. Please indicate what work takes place in what lab and briefly describe the standard methods for the molecular biology techniques used in this work. Please elaborate on two-hybrid assays and provide a summary of the methods. Please detail downstream assays for transfected cells and indicate what strains of E. coli you will use in the lab.
- Section C. Risk Evaluation
 - Biosafety. Please describe personnel training and add the use of safety glasses as needed.
 - Biosecurity. Please describe building and lab security. Please state that primary and secondary leakproof containment will be used when transporting material between labs. Please elaborate on waste management. Be sure to include how you handle solid and liquid waste. Please describe inventory management.
- Section F. Recombinant DNA.
 - NIH Guidelines. Please add Section III-E-1.
 - Please list plasmid vectors under 3. Vectors, Item 2.
- Section N. Safety.
 - Disinfection/Decontamination. Please check 10% bleach for liquid waste.
 - Biosafety Cabinet. Please indicate whether the BSC is in the general lab area or a containment suite. Please update BSC certification information.
 - Personal Protective Equipment. Please check safety glasses

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
26012	Come Thieulent	Pathobiological Sciences	02/25/2026	CRISPR-Cas9 Targeting of EIAV Proviral DNA in Equine Cells: A Pilot Study Towards Functional Cure Strategies	Ryoichi Teruyama	Ramanuj Lahiri

Project Overview:

This project aims to evaluate a gene-editing approach to target and reduce Equine Infectious Anemia Virus (EIAV) in infected equine cells. The research will focus on identifying effective CRISPR-based strategies that can disrupt key regions of the viral genome and limit viral persistence. Initial studies will screen and optimize guide RNA combinations in infected equine cell lines to determine the most effective targets.

The project will then assess the performance of these optimized gene-editing approaches in primary equine immune cells that are naturally susceptible to EIAV infection. Delivery of the gene-editing system will use lipid nanoparticle technology, and the study will evaluate both antiviral efficacy and potential cellular effects. Overall, this work seeks to advance understanding of gene-editing strategies as a potential therapeutic approach for controlling persistent viral infections in animals.

Risk Assessment and Discussion:

This project presents a moderate biosafety risk consistent with in vitro research involving Equine Infectious Anemia Virus (EIAV) in cultured equine cells. The work includes evaluation of a CRISPR-based gene-editing approach in infected cell lines and primary equine macrophages to assess antiviral activity and potential cellular effects.

Potential hazards include handling infectious viral material, infected cell cultures, and gene-editing reagents, with possible exposure through mucous membranes, accidental inoculation, or aerosol-generating laboratory activities. These risks are effectively managed under Biosafety Level 2 (BSL-2) practices, including appropriate PPE, use of a biological safety cabinet, routine decontamination, and proper handling and disposal of biohazardous materials.

With these precautions in place, the project is considered moderate risk and appropriately contained under standard BSL-2 practices. No environmental or security concerns are anticipated.

NIH Guidelines:

Section III-D-1-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: Ramanuj Lahiri

Seconded by: Ryoichi Teruyama

Abstaining: None

Conflicts of Interest: None

Requested Modifications:

- Section A. Project Information
 - Title. Please spell out EIAV.
 - Locations. Please remove all room numbers not associated with the project, including rooms for cell sorting.
 - Personnel. Please list EHS-specific training under specific training for all personnel and the PI.
- Section B. Project Description.
 - Project Goals. Please spell out EIAV and E. Derm cells the first time you use the acronym. Please simply project goals and rewrote in layman's terms.
 - Procedures and Methods. Please ensure this section is also written in layman's terms and indicate what work takes place in what lab. Please briefly describe all procedures, including viral and cell culture, cytotoxicity assay, and indicate what is done with cell lysates. Please describe how you render potentially infectious material inactive and at what point in the procedures. Please indicate what lysis buffer is used for RNA extraction. Please describe the use of equine PBMCs. Please state that cells will be persistently infected and how you plan to separate cells.
- Section C. Risk Evaluation
 - Biosafety. Please update the required PPE and remove N95s if not applicable to this work.
 - Biosecurity. Please specify which disinfectant you use to decontaminate liquid waste and the appropriate contact time. Please remove any mention of shipping and bovine blood if they are not applicable to this project.
- Section D. Project Units
 - Item 11. Please change yes to no.
- Section N. Safety.
 - Disinfection/Decontamination. Please uncheck Quat for liquid waste. Biosafety Cabinets. Please confirm most recent date of certification.

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
26013	Jean Chamcheu	Pathobiological Sciences	03/03/2026	Engineering of Attenuated Vesicular Stomatitis Virus	Ramanuj Lahiri	Brent Stanfield

Project Overview:

This project focuses on developing and evaluating a specially designed oncolytic virus that may help treat cancer and certain inflammatory diseases. These viruses, known as oncolytic viruses, are unique because they can selectively target and destroy cancer cells while also supporting other treatments such as immunotherapy and anti-inflammatory therapies.

One promising option is vesicular stomatitis virus (VSV), which can quickly multiply and naturally target abnormal cells, including cancer cells. However, it concerns safety, and how the immune system reacts to it can limit its use.

To address this, the project creates a modified version of VSV. The virus will be altered to improve safety by replacing its outer protein with one from a harmless virus. This change is expected to reduce risks while keeping its ability to target cancer and other abnormal cells. The modified virus will also include markers that allow researchers to track its behavior in experiments. Overall, the goal is to make oncolytic viruses safer and more effective for treating different types of cancer.

Risk Assessment and Discussion:

This project presents a moderate biosafety risk consistent with research involving a recombinant vesiculovirus platform for oncolytic cancer studies. The work includes an engineered vesicular stomatitis virus (VSV)-based construct with a modified glycoprotein to improve safety and reduce neurotropism, while maintaining the ability to infect mammalian cells.

Potential hazards include handling recombinant viral material and exposure through mucous membranes, accidental inoculation, or aerosol-generating activities. Although the construct is designed to improve safety relative to wild-type VSV, it remains a replication-competent viral system requiring BSL-2 containment. These risks are effectively managed under Biosafety Level 2 (BSL-2) practices, including appropriate PPE, use of a biological safety cabinet, routine decontamination, and proper disposal of biohazardous materials.

With these precautions in place, the project is considered moderate risk and appropriately contained under standard BSL-2 practices. No environmental or security concerns are anticipated.

NIH Guidelines: Section III-D-1-a, Section III-D-3-a, and Section III-E-1
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: Brent Stanfield

Seconded by: Ramanuj Lahiri

Abstaining: None

Conflicts of Interest: None

Requested Modifications:

- Please remove all mention of animal work and associated information throughout this protocol.
- Section A. Project Information
 - Buildings. Please remove specific room information and list only the name of the building in which the rooms are located.
 - Rooms. Please remove DLAM room numbers and provide room labs here.
 - Personnel. Please list EHS-specific training under specific training for all personnel, including the PI.
- Section B. Project Description.
 - Project Goals. Please spell out VSV the first time you use the abbreviated name. This section is well written, but very technical. Please rewrite in layman's terms.
 - Procedures and Methods. Please add a statement at the beginning of this section that the recombinant virus is generated by a colleague and list that person and their institution. Please indicate what work takes place in what lab and what is performed inside a BSC. Please briefly describe all procedures, including cell and viral culture techniques, various assays, and flow cytometry, if applicable. Be sure to include when potentially infectious material is inactivated. Please remove the attached SOP on tissue collection.
- Section C. Risk Evaluation
 - Containment Level. Please uncheck ABSL-2 and BL2-N.
 - Biosafety. Please remove biosafety related to animal work and clarify if flow cytometry is within the scope of this work. Please change verbiage on BSC being sterilized to BSC is decontaminated. Please condense this information. There is a lot of repetition and sometimes conflicting information on PPE requirements. Please move waste disposal information from biosafety and add to biosecurity. Please remove information pertaining to other rDNA work not associated with this project.
 - Biosecurity. Please remove information pertaining to animal work and streamline this section. Please describe the use of Vero cells under Section B. Procedures.

- Section D. Project Units.
 - Items 13. Please change yes to no.
- Section F. Recombinant DNA.
 - NIH Guidelines. Please remove Section III-D-4-b, and add Section III-D-1-a, Section III-D-3-a, and Section III-E.
 - Vector. Please change no to yes for 2/3 virus genome.
 - Packaging cell lines. Please list BHK21 cells.
 - Experimental hosts. Please remove mice and list cell lines under item 2. Please change item 3 to no.
- Section J. Human Pathogens.
 - Pathogens used. Please list VSV and complete the rest of this section accordingly, including collaborator information.
- Section K. Animal Pathogens.
 - Please change yes to no for animal infections.
 - Collaborator information. Please provide the collaborator information for the recombinant VSV.
- Section M. Human/Primate Cell Lines and Tissues.
 - Please check cell lines and list the cell lines used in the lab under item 3.
 - Please shorten the containment/disposal/destruction measures to procedures relevant to cell culture and related waste.
- Section N. Safety.
 - Administrative Controls. Please uncheck incineration for animal carcasses.
 - Stock Cultures. Please change no to yes and complete the corresponding information, including the room number.
 - Biosafety Cabinets. Please list all BSCs used, regardless of whether they are in the same room. Please remove BSC information for DLAM and double-check certification dates.
 - PPE. Please describe the use of N95s and face shields under Section C. Biosafety.

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
26014	Jonathan Hernandez	Entomology	03/03/2026	Towards Novel Molecular Targets and Insecticide Resistance Mechanisms in Arthropod Pests	Sue Hagius	Michelle Dennis

Project Overview: This project aims to better understand how arthropods respond to insecticides and how resistance to these compounds develops. The research will investigate the molecular, genetic, and physiological mechanisms underlying insecticide response, with a focus on identifying changes that contribute to reduced susceptibility. Laboratory and field studies will be used to connect these molecular changes to measurable toxicological outcomes.

Overall, this work seeks to identify new targets within arthropod biology that can be leveraged to improve pest control strategies and address the growing challenge of insecticide resistance.

Risk Assessment and Discussion: This project presents a low to moderate biosafety risk consistent with research involving arthropods and insecticide exposure studies in laboratory and field settings. The work focuses on mechanisms of insecticide response and resistance and linking these changes to toxicological outcomes.

Potential hazards are generally low and include handling live arthropods, exposure to insecticides, and routine laboratory procedures. Additional considerations may include work with non-pathogenic biological materials or recombinant DNA, with minor risks such as accidental exposure or sharps-related injury.

These risks are effectively managed under Arthropod Containment Level 1 (ACL-1), Biosafety Level 1 (BSL-1), and Biosafety Level 2 (BSL-2) practices, including appropriate PPE, standard microbiological techniques, use of containment equipment as needed, routine decontamination, and proper material disposal.

With these precautions in place, the project is considered to have low to moderate risk and is appropriately contained under standard ACL-1, BSL-1, and BSL-2 practices. No environmental or security concerns are anticipated.

NIH Guidelines: Section III-E-1

Biosafety Level: BSL-1, BSL-2, and ACL-1

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. Personnel conducting field work must also receive appropriate training in field safety, arthropod handling, and the safe use of insecticides prior to performing off-site activities.

IBC Vote: **Approved at BSL-1, BSL-2, and ACL-1 pending receipt of modifications.**

Motion made by: Abigail Fish

Seconded by: Sarah Keeton

Abstaining: None

Conflicts of Interest: None

Requested Modifications:

- Section B. Project Description.
 - Procedures and Methods. Please indicate which PPE is worn for each procedure, including field work. Please clarify whether you collect your own ticks or obtain them from a source. Please clarify what type of blood is used for feeding mosquitoes and how you plan to feed ticks is applicable. Please indicate which kits you will use for DNA/RNA extractions and clarify whether you plan to extract nucleic acids from ticks, mosquitos or both. Please indicate where fluorescent small molecules are obtained and list the chemicals you plan to use. Please list plasmids you plan to use and briefly describe transfection protocol. Please expand on bottle, topical/contact, and knockdown-to-mortality assays. Please describe appropriate containment for transport of live insects and expand on post-molecular analyses. Please add receptor information listed under Section F. and a summary of ligand response assay procedures.
- Section C. Risk Evaluation
 - Biosecurity. Please indicate that liquid waste is decontaminated in a final concentration of 10% bleach for a minimum of 30 minutes of contact time.
- Section D. Project Units.
 - Item 7. Please change no to yes and complete the corresponding section.
- Section F. Recombinant DNA.
 - Please add G-protein coupled receptor and ligand response assay information to Section B. Procedures.
 - Please list plasmids under plasmids as a vector.
 - Please remove information on mosquito species that are not genetically modified under experimental hosts. Please expand on mosquito/tick exposure to recombinant DNA.
- Section N. Safety.
 - Disinfection/Decontamination. Please uncheck autoclave for animal carcasses
 - Stock Cultures. Please clarify whether stocks of any type of material will be maintained.
 - Biosafety Cabinets. Please clarify if BSC is in the general lab area or containment suite.
 - PPE. Please describe the use of N95s under Section C. Biosafety. Please check other and add any other relevant PPE for field work.

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
26015	William Moe	Civil and Environmental Engineering	03/04/2026	Molecular Biological Tools (MBTs) for Assessing Biodegradation and Biotransformation of Aromatic Hydrocarbons and Cyclic and Non-Cyclic Amines	Michael Hooks	Sarah Keeton

Project Overview:

This project aims to develop and apply molecular tools to detect and quantify bacteria capable of breaking down environmental pollutants. The research focuses on microorganisms that can biodegrade or transform contaminants such as aromatic hydrocarbons and amine-based compounds commonly found in contaminated environments.

Using PCR-based methods, the study will assess the presence and abundance of these bacteria in environmental samples such as groundwater and sediments. The findings will improve understanding of how contaminants are naturally processed in the environment and support more accurate models of pollutant fate and transport. Ultimately, this work will help inform environmental monitoring and decision-making related to site remediation and management.

Risk Assessment and Discussion:

This project presents a low to moderate biosafety risk consistent with environmental microbiology research involving the detection and quantification of bacteria from environmental samples such as groundwater and sediments. Potential hazards are generally low and include handling environmental samples that may contain unknown or opportunistic microorganisms, as well as routine laboratory procedures and minor risks such as accidental contact, aerosol exposure, or sharps-related injury.

These risks are effectively managed under Biosafety Level 1 (BSL-1) and Biosafety Level 2 (BSL-2) practices, including standard microbiological techniques, appropriate PPE, use of containment equipment as needed, routine decontamination, and proper material disposal.

With these precautions in place, the project is considered low to moderate risk and appropriately contained under standard BSL-1 and BSL-2 practices. No environmental or security concerns are anticipated.

NIH Guidelines:

Section III-F-8, Appendix C

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. Personnel conducting field work must also receive appropriate training in field safety and safe collection and handling of environmental water samples prior to performing off-site activities.

IBC Vote: **Approved at BSL-1 and BSL-2 pending receipt of modifications.**

Motion made by: Michael Hooks

Seconded by: Sarah Keeton

Abstaining: None

Conflicts of Interest: None

Requested Modifications:

- Section A. Project Information.
 - Locations. Please add room number for genelab at SVM if it is being used.
- Section B. Project Description.
 - Procedures and Methods. Please indicate what work is performed within a BSC and include a statement about the commercial company being used and genelab at the SVM if applicable.
- Section C. Risk Evaluation
 - Biosafety. Please describe PPE worn in the field and update IBC to IBC. Please state when an N95 is required. Please clarify when you anticipate splashes/sprays to the face.
 - Biosecurity. Please add a statement on inventory management.

Upcoming Meetings: April 9, 2026 @1:30 pm via Zoom

Adjourned: 3:47 pm