IBC Meeting Minutes

Chair- Ken Bondioli
Research Safety- Abigail Fish
Thursday, May 7, 2026
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
	James Bush	Blue Cross Blue Shield of Louisiana	Local Non-Affiliated Member

Members Present:	Ken Bondioli, Abigail Fish, Sarah Keeton, Sue Hagius, Michael Hooks (proxy- Jason Lejeune), Ryoichi Teruyama, William Doerrler, Brent Stanfield, Rebecca Christofferson, and Jong Ham (proxy- Taylor Santaloci).	
Members Absent:	Christy White, Michelle Dennis, Jeff Davis, Niranjan Baisakh, Ramanuj Lahiri, and James Bush.	
Others Present:	Shallinie Thangadurai	Post-Doctoral Researcher, Murashov Lab, Department of Comparative Biomedical Sciences
	Alexander Murashov	Department Head and Professor, Department of Comparative Biomedical Sciences
	Anne Grove	Gregory Cannaday Burns Professor, Department of Biological Sciences

Call to Order: 1:38 pm

Approval of Minutes from: April 9, 2026

Motion Made by:	Sue Hagius
Seconded by:	William Doerrler
Abstaining:	Rebecca Christofferson and Brent Stanfield

Business and Call for New Business

The BSL-3 lab is indefinitely shut down while repairs are made on the primary exhaust system.

Rebecca Christofferson resigned from the committee after accepting another job and leaving LSU. The May IBC meeting will be her last.

New IBC Registrations and Amendments for Review

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
26019 (Renewal	Anne Grove	Biological Sciences	04/21/2026	Purine Catabolites as Inducers of Bacterial Gene Expression	William Doerrler	Ryoichi Teruyama

Project Overview:

This project aims to identify and characterize bacterial transcription factors involved in sensing the ligands urate and xanthine in Burkholderia thailandensis. The research focuses on understanding protein interactions and gene regulatory pathways associated with the Major Facilitator Transport Regulator (MftR) transcription factor. Urate and xanthine function as ligands that attenuate DNA binding by these transcription factors, thereby influencing bacterial gene regulation and environmental response pathways. Experimental approaches include pull-down assays using epitope-tagged proteins, mass spectrometry to identify interacting partners, targeted genetic modification and deletion of bacterial genes, and analysis of gene expression via qRT-PCR, RNA sequencing, and chromatin immunoprecipitation. The overall goal is to better understand the regulatory mechanisms underlying bacterial metabolic adaptation and environmental sensing pathways.

Risk Assessment and Discussion:

This project presents a low biosafety risk consistent with BSL-1 research involving *Burkholderia thailandensis*, recombinant DNA methods, and routine bacterial genetic modification. The work focuses on transcription factor regulation and gene expression analysis and does not involve procedures intended to increase pathogenicity, virulence, host range, environmental persistence, or antimicrobial resistance.

Potential hazards are limited to routine laboratory risks associated with handling bacterial cultures, recombinant or modified strains, and standard molecular biology procedures, including pull-down assays, qRT-PCR, RNA sequencing sample preparation, and chromatin immunoprecipitation. Additional risks may include accidental exposure, splash or aerosol generation during culture manipulation, and contamination of work surfaces or equipment.

The project is appropriately managed under BSL-1 practices, including standard microbiological techniques, appropriate PPE, routine decontamination, proper waste handling, and institutional oversight for recombinant or synthetic nucleic acid work. The PI indicated that personnel use N95 respirators when handling the bacteria,

	particularly during procedures with aerosol-generating potential, as an additional precaution beyond standard BSL-1 containment. With these practices in place, the project is considered low risk and appropriately contained at BSL-1. The committee discussed the use of modified *B. thailandensis* strains, routine molecular biology procedures, and the PI's use of N95s during higher-exposure tasks. No significant environmental or security concerns are anticipated.
NIH Guidelines:	Section III-E-1
Biosafety Level:	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:	William Doerrler
Seconded by:	Ryoichi Teruyama
Abstaining:	None
Conflicts of Interest:	None

Requested Modifications:

- Section A. Project Information.
  - Locations. Please add the room number for the autoclave
- Section B. Project Description.
  - Procedures and Methods. Please add a statement that all work takes place in your labs and that the labs are linked without passing through common-use corridors. Please elaborate on procedures to ensure clarity. Please describe how you identify sequences used for recombinant DNA work and indicate if you plan to explore additional transcription factors outside of MftR. Please elaborate on the mechanism of action of pKNOCK. Please elaborate on the additional experiments and identify the commercial kits used in the workflow. Please also add a description of RNA sequencing and indicate where this work is being done.
- Section C. Risk Evaluation.
  - Biosecurity. Please describe secure transport of waste from the lab to the autoclave room. Once autoclaved, please detail what happens to the waste.

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
26020	Alexander Murashov	Comparative Biomedical Sciences	04/27/2026	Role of miRNAs in Transmission of Metabolic Risks	Sue Hagius	Sarah Keeton

Project Overview:

The overall objective of this project is to investigate the role of microRNAs (miRNAs) in the developmental programming of mitochondrial bioenergetic efficiency and metabolic regulation. Using the model organism Drosophila melanogaster and *Drosophila* cell lines, the research will examine how altered miRNA expression influences mitochondrial function, bioenergetic pathways, and offspring metabolic state. Experimental approaches include recombinant DNA techniques, genetic manipulation of miRNA expression, maintenance and modification of *Drosophila* cell lines, and molecular analysis of metabolic and developmental pathways. The overall goal is to better understand the role of miRNA-mediated regulation in developmental and metabolic programming.

Risk Assessment and Discussion:

This project presents a low biosafety risk consistent with BSL-1, ACL-1, and BL1-N research involving Drosophila melanogaster, *Drosophila* cell lines, and recombinant DNA methods. The work focuses on miRNA-mediated regulation of mitochondrial bioenergetic efficiency, metabolic programming, and offspring developmental outcomes. No infectious agents or materials associated with human disease are proposed.

Potential hazards are minimal and limited to routine laboratory risks associated with handling fruit flies, established insect cell lines, recombinant DNA constructs, and standard molecular biology procedures. These may include accidental exposure to laboratory reagents, contamination of work surfaces or cultures, escape or unintended release of genetically modified flies, or minor sharps/splash risks during routine sample preparation and cell culture work.

The project is appropriately managed under BSL-1 practices for cell culture and molecular biology procedures, ACL-1 containment for work involving *Drosophila melanogaster*, and BL1-N containment for recombinant or genetically modified fly strains. Controls include standard microbiological techniques, appropriate PPE, routine decontamination, secure maintenance and handling of fly stocks, proper waste disposal, and institutional oversight for recombinant or synthetic nucleic acid work.

With these precautions in place, the project is considered low risk and appropriately contained under BSL-1, ACL-1, and BL1-N practices. No significant environmental, public health, or security concerns are anticipated.

NIH Guidelines:	Section III-D-4-a Section III-F-8
Biosafety Level:	BSL-1, ACL-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. All training must be completed before beginning work and refreshed as required by LSU policies and SOPs
IBC Vote:	**Approved at BSL-1, ACL-1, and BL1-N pending receipt of modifications**
	Motion made by: Sue Hagius
	Seconded by: Sarah Keeton
	Abstaining: None
	Conflicts of Interest: None

Requested Modifications:

- Section A. Project Information.
  - Locations. Please add the room numbers for the live cell sorter and seahorse equipment.
  - Personnel. Please list EHS-A safety training for all personnel, including the PI.
- Section B. Project Description.
  - Project Goals. Please add information on the use of recombinant DNA in Drosophila cells.
  - Procedures and Methods. Please indicate what work takes place in what lab and what activities are performed inside a BSC. Please elaborate on the genetic crosses, driver lines, and RNAi strategy used in this work. Please describe known gene targets or reference the attached list of targets. Please provide a general description of all procedures, including cell culture and transfection methods, live-cell sorting, dual-luciferase assays, and the Seahorse metabolic assay. Please spell out all acronyms the first time you use them. Please indicate what Dcd, Elav, and Topi do. Please update red bags to biohazardous waste bins. Please add a statement on the PPE required for specific procedures, particularly live cell sorting. Please indicate what commercially available kits you plan to use and add the room number for the seahorse equipment. Please add the approved protocol number for live cell sorting.
- Section C. Risk Evaluation.
  - Containment Level. Please check ACL-1.
  - Biosafety. Please add information on the use of BSC and describe how you plan to destroy organisms carrying rDNA. Please indicate what PPE is worn when working in the lab and for live cell sorting. Please indicate training requirements for personnel, including fly handling, rDNA handling, live cell sorting, etc.

    - Biosecurity. Please describe lab and building security measures. Please also describe how material is securely transported between labs and how inventory is managed. Please elaborate on fly containment, including room information and procedures for escaped flies. Please clarify waste disposal practices for solid and liquid waste.
- Section D. Project Units.
    - Item 2. Please change no to yes and complete the corresponding section.
- Section G. Transgenic Animals.
    - Please add NIH Guidelines Section III-D-4-a. Coding sequences. Please add Topi. Containment methods. Please elaborate on how flies are contained at the facility level. Animal disposal. Please clarify method of disposal for transgenic animals.
- Section N. Safety.
    - Disinfection/decontamination. Please check Stericycle for solid waste. Biosafety Cabinet. Please describe the use of a BSC under Section C. Biosafety.

Upcoming Meetings:	June 18, 2026 @1:30 pm via Zoom
Adjourned:	2:28 pm