

IBC Meeting Minutes

Chair- Ken Bondioli

Research Safety- Abigail Fish

Thursday, January 15, 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

New IBC Registrations and Amendments for Review

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
26001 (Renewal)	Basel Abuaita	Pathobiological Sciences	12/21/2025	Regulation of Innate Immune Responses by Cellular Stress Sensors	Rebecca Christofferson	Michael Hooks

Project Overview: This will have to be generated once project goals are updated.

Risk Assessment and Discussion: This project presents a moderate but well-controlled biosafety risk and involves recombinant DNA techniques, gene editing, the use of commercially available second-generation lentiviral systems, and live mammalian cell sorting. All work is conducted under BSL-2 containment.

The study includes expression of recombinant fusion proteins to examine protein interactions and CRISPR-based gene editing or knockdown of host factors in mammalian cells. Plasmids and lentiviral vectors do not encode toxins, select agents, oncogenes, or gene-drive elements and are used exclusively for in vitro applications. Lentiviral systems are replication-incompetent and are not produced or amplified in the laboratory.

Additional hazards include the use of commercially purified lipopolysaccharide as a cellular stressor and risks associated with live human cell culture, flow cytometry, chemical reagents, and laboratory equipment. These risks are mitigated through standard BSL-2 practices, appropriate PPE, use of a biosafety cabinet, aerosol containment measures during cell sorting, and proper decontamination and waste disposal.

With these measures in place, the work is considered appropriately contained within **BSL-2** environments, and no unusual risks to personnel, the environment, or public health 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: Rebecca Christofferson

Seconded by: Michael Hooks

Abstaining: None

Conflicts of Interest: None

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 update this section to reflect the overall goals of the work in layman's terms. As written, it is very technical.
 - Procedures and Methods. Please indicate what work takes place in what room and what is done inside a BSC. Please ensure all procedural information is in this section, including procedures listed under Section C. Biosafety and expand on what is currently listed. Please briefly describe E. coli work and downstream assays. Be sure to include the strain of E. coli used and information on how and when potentially infectious material is inactivated. Please state that you will use a second-generation lentiviral vector. Please state that you will use live and fixed cell sorting. Please indicate that primary mouse cells are harvested from animal work approved under another IBC and include that number here. Please indicate what specific gene targets you plan to knock down and how you transduce cells. Please list the mammalian cell lines you plan to use. Please state what additional PPE is required.
- Section C. Risk Evaluation.
 - Biosafety. Please remove procedural information from this section and add information on biosafety controls including PPE use, BSC use, training, and how you control aerosols outside the BSC if applicable. Please mention that all biosafety practices for live cell sorting will be followed per the IBC, and include the number here.
 - Biosecurity. Please briefly describe solid and liquid waste management and indicate where the freezer and liquid nitrogen containers are. Please state that primary and secondary leakproof containment is used for secure transport.
- Section F. Recombinant DNA

- Deletions/Insertions. Please change “no” to “yes”. Coding sequences. Please clarify what genes are from what species. Please remove “and others” throughout this section. Others identified later can be added as an amendment. Please state that 2nd-generation lentiviral vectors will be used. Please list species of E. coli under Section B. procedures. Please add the IBC number for harvesting mouse primary cells.
- Section M. Human and Primate Blood, Bodily Fluids, or Tissues.
 - Please uncheck blood, tissues, primary culture, and serum.
 - Containment, Disposal, and Destruction Measures. Please reference the approved IBC for live cell sorting and list that number here. Please indicate how leftover cells will be discarded after sorting.
- Section N. Safety.
 - Engineering Controls. BSC. Please update the BSC certification information.
- Biosafety Manual. Please review and update your Biosafety Manual. It is listed as a manual for BSL1. Please also update IBRDSC to IBC.

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
26002	Bing-Hao Luo	Biological Sciences	1/6/2026	Integrin Alpha (v) Beta (8) Structure and Bidirectional Signaling	William Doerrler	Abigail Fish

Project Overview:

This project examines integrins, cell-surface proteins that mediate cell adhesion and transmit signals across the cell membrane. The integrin $\alpha\beta8$ is essential for normal embryonic development, particularly for proper brain and vascular formation; loss of the $\beta8$ subunit in mice results in lethal defects in blood vessel development.

Most integrins exist in a bent, low-affinity state and become extended and active only when signaling is required. This project is based on the hypothesis that $\alpha\beta8$ is structurally unique and exists primarily in an extended, high-affinity conformation under normal conditions, representing a distinct mode of integrin signaling.

The proposed work has two aims: (1) to identify regions of $\alpha\beta8$ responsible for maintaining its extended conformation and signaling properties using chimeric integrins with $\beta8$ and $\beta3$ domains, and (2) to visualize the structure of $\alpha\beta8$ using electron microscopy and X-ray crystallography of purified extracellular domains. Overall, the study seeks to define a novel integrin activation mechanism and provide structural insight into why $\alpha\beta8$ functions differently from other integrins.

Risk Assessment and Discussion:

This project presents a low biosafety risk and involves recombinant DNA techniques, expression of engineered integrin proteins, and structural analysis of integrin $\alpha\beta8$ using established human-derived cell lines. All cell-based activities are conducted under BSL-2 containment.

Recombinant integrin constructs encode modified integrin subunits only and do not contain pathogenic sequences, toxins, oncogenes, viral elements, or gene-drive components. Expression is limited to in vitro human cell culture for structural and functional analyses. Structural studies include purification of extracellular domains of $\alpha v\beta 8$, followed by electron microscopy and X-ray crystallography using non-infectious, non-replicative protein preparations handled under BSL-1 containment.

Primary hazards are limited to routine risks associated with human cell culture, recombinant DNA handling, chemical reagents, and laboratory equipment. These risks are mitigated through standard laboratory practices, appropriate PPE, use of a biosafety cabinet, surface decontamination, and proper waste disposal.

With these measures in place, the work is considered appropriately contained within **BSL-2** (cell culture) and **BSL-1** (purified protein) environments, and no unusual risks to personnel, the environment, or public health are anticipated.

NIH Guidelines:	Section III-D-1-a
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:	Abigail Fish
Seconded by:	William Doerrler
Abstaining:	None
Conflicts of Interest:	None

Requested Modifications:

- Section A. Project Information
 - Personnel. Buildings. Please add Life Science Annex and VetMed. Room Numbers. Please add room numbers for DLAM, VetMed and LSA locations.
- Section B. Project Description.
 - Procedures and Methods. Please indicate what work takes place in what lab. Please also add a general statement at the beginning of this section about PPE use, BSC use, and solid and liquid waste disposal. Please briefly describe “some studies” and add a statement

on secure transport between labs and/or buildings. Please add a statement indicating that, once the cell culture supernatant has been ultrafiltered, it is cell-free and therefore not considered potentially infectious material, as it contains only purified proteins.

- Section C. Risk Evaluation
 - Containment Level. Please check BSL-1.
 - Biosafety. Please indicate which room is an office. Please indicate that PPE, including a lab coat, disposable gloves, and safety glasses, is required and must be worn at all times when working in the lab. Please move waste disposal information to the biosecurity section.
 - Biosecurity. Please briefly describe secure transport between labs and/or buildings. Be sure to indicate that primary and secondary leakproof containment will be used. Please add a statement on personnel training and inventory management.
- Section N. Safety.
 - Engineering Controls. BSC. Please update the BSC certification date.

Upcoming Meetings: February 12, 2026 @1:30 pm via Zoom

Adjourned: 2:24 pm