IBC Meeting Minutes

Chair- Ken Bondioli
Research Safety- Abigail Fish
Thursday, July 17, 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, Sue Hagius, Niranjan Baisakh, Abigail Fish, Ramanuj Lahiri, Greg Pettis (Proxy- William Doerrler), Michael Hooks, and Brent Stanfield

Members Absent: Christy White, Ryoichi Teruyama, Michelle Dennis, Jeff Davis, Jong Ham, Ramanuj Lahiri, Sarah Keeton, and Rebecca Christofferson.

Others Present:		
	Greg Pettis	Professor, Biological Sciences
	David Vinyard	Associate Professor, Biological Sciences

Call to Order: 1:31 pm

Approval of Minutes from: Thursday, June 12, 2025

Motion Made by:	Sue Hagius
Seconded by:	Brent Stanfield
Abstaining:	Niranjan Baisakh

The minutes from the June meeting are not complete due to Dr. Joseph Francis failing to return his revisions prior to the July meeting and as a result were tabled until the August 2025 meeting. At this time Dr. Francis has completed revisions and the protocol was approved, therefore we were able to vote on the minutes from June 2025.

Thursday, July 17, 2025

Motion Made by:	Sue Hagius
Seconded by:	Brent Stanfield
Abstaining:	None

Business and Call for New Business

The IBC Charter and Policies have been updated. They will be sent to the committee for review and comment on August 15, 2025. Committee members will have until the October 2025 IBC meeting to provide comments to the IBC Administrator, Dr. Abigail Fish.

New IBC Registrations and Amendments for Review

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2
25049 (Renewal)	David Vinyard	Biological Sciences	7/16/2025	Elucidating Molecular Mechanisms of Photosynthetic Water Oxidation in Cyanobacteria	William Doerrler	Niranjan Baisakh

Project Overview:

This research project seeks to better understand how certain unstable molecules, called *reactive oxygen species* (ROS), are formed during photosynthesis. These molecules can play both helpful and harmful roles in cells: they act as signals that tell the cell how to respond to its environment, but they can also damage proteins and speed up their breakdown. By learning exactly when and where ROS are produced, scientists can gain insights into how plants manage energy and stress.

To do this, the PI is studying *Photosystem II*—a protein complex central to photosynthesis. They will purify this protein from cyanobacteria and make point mutations that allow them to attach special "spin trap" molecules. These traps work a bit like sensors, helping researchers pinpoint the timing and location of ROS production.

Risk Assessment and Discussion:

This project presents minimal safety and security risks. The research involves laboratory studies of *Photosystem II* proteins isolated from cyanobacteria, which are non-pathogenic and widely used as safe model organisms. The work does not involve infectious agents, human subjects, or hazardous genetic modifications. The introduction of point mutations and use of spin trap reagents are routine molecular biology techniques that do not increase risk to researchers or the public.
The primary risks are standard laboratory considerations such as handling of biological samples, use of chemical reagents, and ensuring proper waste disposal. These are well mitigated through LSU's established biosafety and chemical safety protocols. **Biosafety Level 1 (BSL-1) practices are appropriate for this work**, as it involves only low-risk materials and procedures. No environmental or security risks are anticipated, and the overall project is classified as **low risk** within standard biosafety guidelines.

NIH Guidelines: Section III-F-8, Appendix C.
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: Niranjan Baisakh
	Seconded by: Brent Stanfield
	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 BSL1 safety training and list the courses under specific training. Please also elaborate on the staff experience related to the project.
- Section B. Project Description.
  - Project Goals. Please add information on what the overall project goal is. Why is creating cysteine mutations important in this bacterium?
  - Procedures and Methods. Please indicate what work takes place in what lab. Please list the relevant plasmids and antibiotic resistance markers. Please also briefly describe "traditional cloning techniques" and list the genes of interest. Please indicate how bacteria are inactivated for PCR and protein purification. Please provide additional details on the process of mutagenesis, transforming plasmids into E. coli, purifying, and then transforming into cyanobacteria. The IBC does not need a detailed SOP, but we ask for a broad overview of the process. Please also indicate how cells will be concentrated.
- Section C. Risk Evaluation.
  - Biosecurity. Please state that no biohazardous material is moved between labs, only purified proteins.
- Section F. Recombinant DNA.
  - DNA Guidelines. Please remove Section III-E and add Section III-F-8, Appendix C.
- Section N. Safety.
  - Sharps. Please describe the use of needles and scalpels under Section B. Procedures and Methods and describe how sharps are handled under Section C. Biosecurity.

Reg. #	PI Name	Affiliation of PI	Date Received	Title of Project	Reviewer 1	Reviewer 2

25050	Huangen Ding	Biological Sciences	08/05/2025	MicroNEET/CISD Mediates Diet-Relevant Energy Metabolism and Promotes Breast Cancer Cell Development	Sue Hagius	Michael Hooks

Project Overview:	The project was unclear due to limited information within the registration. The registration was returned to the PI for additional edits before full committee review.
Risk Assessment and Discussion:	The IBC did not feel that this application contained enough information to complete a risk assessment; therefore, the registration was put "ON HOLD" until additional information is received.
NIH Guidelines:	To be determined
Biosafety Level:	To be determined
Training Requirements:	To be determined once more information is provided.

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.
  - Title. Please update the title to reflect the work done at LSU.
  - Personnel. Training. Please complete the EHS online training for PI and staff.
- Section B. Project Description.
  - Project Goals. Please clearly state what the overall goal of the work to be conducted at LSU is. Work done at other institutions can be removed.
  - Procedures and Methods. Please elaborate on the work being done at LSU and indicate in which room this work is done. There are several lab numbers listed under Section A. Locations, and it is unclear what is done where. Please list plasmids being used and briefly describe the recombinant DNA work. If the work was previously done, please indicate what was done and add the previously

approved IBC number for that work. Please briefly explain how proteins are extracted. The important information to include is how bacteria are inactivated in this process. Once the protein is purified, please give a general statement on what work is done. Detailed procedures are not necessary.

- Section C. Risk Evaluation.
  - Biosafety. Please add safety glasses to the required PPE and indicate when this PPE is worn. Is the same PPE required after proteins have been extracted?
  - Biosecurity. Please describe secure transport between labs. If no biohazardous material is transported between labs, please state that here and indicate that only purified proteins are transported. Please elaborate on waste disposal procedures. What does "disposed accordingly" mean? Please describe how sharps are discarded and how inventory is managed.
- Section F. Recombinant DNA.
  - Item 8. Antibiotic Resistance. Please indicate what antibiotic resistance cassettes are in the plasmids being used.
- Section N. Safety.
  - Stock Cultures. Please uncheck "not applicable".

Upcoming Meetings:	September 11, 2025 @1:30 pm via Zoom
Adjourned:	2:14 pm