

Middle Tennessee State University
IBC meeting minutes

Date of meeting: March 5, 2026

Format of meeting: Virtual

Voting members in attendance:

April Weissmiller, chair	<input checked="" type="checkbox"/>	Mary Farone	<input checked="" type="checkbox"/>
Justin Miller	<input checked="" type="checkbox"/>	Ying (Iris) Gao	<input checked="" type="checkbox"/>
Jason Jessen	<input type="checkbox"/>	David Nelson	<input checked="" type="checkbox"/>
Jessica Arbour	<input checked="" type="checkbox"/>	William Tansey	<input checked="" type="checkbox"/>
Brianna Smith	<input type="checkbox"/>		

Non-voting members and/or guests:

Emily Anne Badger, Research Compliance	<input checked="" type="checkbox"/>
Jim Rowland, EH&S	<input type="checkbox"/>
Brian Robertson	<input checked="" type="checkbox"/>

Introductions/Announcements

The meeting was called to order at 10:01 AM with a quorum of at least 50% voting members present.

The chair went through the agenda items. There were no new introductions or announcements.

Research Compliance Officer provided an update on NIH modernization, including a link to the open comment site in case members would like to provide their feedback.

Registration reviews and/or amendments to pre-existing protocols

There were two IBC protocol submissions to review by James Brian Robertson in the Biology Department. The chair reminded the committee of the three motions that can be voted on: approve, approve with minor modifications, or deny approval.

Protocol 1, James Brian Robertson

Title (from protocol): Basidiobolus transformation

Research Statement (from protocol): *Basidiobolus meristosporus* is a fungus that is part of the microbiome of reptiles and amphibians. Being able to transform this fungus with a DNA vector will expand the types of experiments that can be done on the fungus to better understand its role in the microbiome. The goals are: 1) Construct a DNA vector that can be transformed into *Basidiobolus meristosporus* and 2) Experimentally devise a way to transform the fungus with the vector. This project does not include plans to reintroduce the fungus to animals. If this project is successful and other labs want to use this project's products to introduce modified *B. meristosporus* into animals, that PI will submit a separate safety protocol.

Biohazardous risk categories:

1. Use rDNA for molecular cloning
2. Use of K-12 derived *E. coli* for amplification of plasmid DNA
 - a) Top 10
3. Use of fungi strain *Basidiobolus meristosporus*
 - a) Commonly found in the environment
 - b) Enriched in amphibian droppings, susceptible to anti-fungal treatment
 - c) Cases of human *Basidiobolus meristosporus* infection are highly rare.
4. Introduction of antibiotic resistance (selection marker) into *Basidiobolus meristosporus*
 - a) Hygromycin B resistance

Training and Facilities: Proposed facilities/rooms have been approved for BSL-1 work, biosafety training for investigator and personnel on the protocol has been verified by the Biology designated training coordinator.

Committee discussion: Repetition of disinfection procedures is required in the "Additional Detail" section, even though already listed elsewhere in protocol. Clarification on procedures was discussed as well, and protocol structure improvements will be implemented to facilitate the addition of these procedures.

Chair moved to approve with minor modifications, DN seconded after a short discussion
7/7 voted to approve with minor modifications

Protocol 2, James Brian Robertson

Title (from protocol): The Robertson Omnibus Protocol

Research Statement (from protocol): This protocol is to cover the safety concerns for the general nature and activity of the Robertson lab involving typical exploratory experiments regarding molecular cloning, yeast physiology, and non-pathogenic microbial genetics; experiments which may not be cohesive or long-term enough at the exploratory stage to package as a single IBC application. The Robertson lab generally seeks to discover/invent: 1) microbe-related tools and capabilities that expand society's energy options regarding alternative fuels to petroleum, 2) molecular tools and strategies for lowering the barrier to industrial heterologous protein production work streams, 3) new bioluminescent reporter tools.

Biohazardous risk categories:

1. Use rDNA for molecular cloning
2. Use of K-12 derived *E. coli* for amplification of plasmid DNA
 - a) Top 10
 - b) DH5 α
3. Use of non K-12 derived *E. coli* for purification/amplification of plasmid DNA
 - a) BL21(DE3): nonpathogenic
4. Use of various yeast and bacterial strains, BSL-1 strains
5. Genetic engineering of various yeast and bacterial strains using rDNA

Training and Facilities: Proposed facilities/rooms have been approved for BSL-1 work, biosafety training for investigator and personnel on the protocol has been verified by the Biology designated training coordinator

Committee discussion: Clarifications on the "Additional Detail" section of the protocol were requested.

Chair moved to approve with minor modifications, MF seconded

7/7 voted to approve with minor modifications

Incidents to report

There were no safety incidents to report.

Discussion Items

Update from chair: Guidelines to support investigators preparing protocols will be worked on throughout the summer for presentation at the fall committee meeting, based on areas of research that are most relevant to the university.