UNIVERSITY OF GEORGIA

University of Georgia NIH IBC Meeting Minutes
Thursday, October 23, 2025
Tucker Hall, Conference Room 124

Attendance:

	Voting Members:		*Staff:*
✓	**Barrera, Zeke**	✓	**Andrea Ferrero-Perez**
X	**Brindley, Melinda (alternate)**	✓	**Rachel Johnston**
✓	**Burgess, Brandy**	✓	**Caleb Mason**
X	**Chambers, Catherine**		
✓	**Davis, Ruth**		
X	**Demesa Neace, Catherine**		
✓	**Esquivel, Sandy**		
✓	**Etheridge, R Drew**		
✓	**Helms, Shelly**		
✓	**Kimble, J Brian**		
X	**King, Christopher (alternate)**		
✓	**Kiser, Manley (alternate)**		***Guests:***
✓	**Kvitko, Brian**		**None**
✓	**Lafontaine, Eric (Chair)**		
✓	**Mohnen, Debra (alternate)**		
✓	**Ortega, Ynes**		
✓	**Ottesen, Elizabeth**		
X	**Perez, Daniel**		
✓	**Stockton, Patrick**		
X	**Tompkins, Mark (alternate)**		

Key: ✓ = present, **X** = absent

Meeting was open to the public.

Call to Order: Lafontaine called the meeting to order at 12:11 PM

Review of meeting minutes from 09/25/2025: The minutes were reviewed and approved.

VOTE			
Approved: 11	Against: **0**	Abstain: 1	Tabled: **0**

1. **Protocols for full committee review:**

I. **1. Functional analysis of glycans and associated proteins in protists 2. Protist oxygen sensing in human disease (West 2025-0066) Five-year resubmission of ongoing work. Presented by: R. Drew Etheridge**

Research investigates how sugar molecules affect proteins and how oxygen influences these processes in protists. Work begins with the model amoeba Dictyostelium and extends to the parasite Toxoplasma gondii. Approaches include biochemical studies of proteins expressed in bacteria and genetic mutations in the organisms to assess roles in oxygen sensing, cell sorting, proliferation, and differentiation. Findings aim to improve understanding of cell function and may inform future drug development for T. gondii.
Training requirements are up to date for all personnel.

Labs in compliance with the NIH guidelines.

Discussion/Recommendation points:
The committee voted to approve the protocol with the following revisions;

1. Page 5 – Non- technical synopsis- Contains typos. Please revise.
2. Page 6 – Technical Synopsis - Contains typos. Please revise.
3. Page 8 – Please indicate that additional genes will be provided to the Office of Biosafety as they are identified.
4. Page 10 – Part E – Please check "yes"

VOTE			
Approved: 12	Against: **0**	Abstain: 0	Tabled: **0**

PI will be notified of the committee's request for modifications.

Protocol approved for:
Biosafety Leve: rDNA BL2, BL-1, BSL-2
Animal Biosafety Level: N/A
Greenhouse Biosafety Level: N/A
Applicable NIH Guidelines: III-E; III-D-1-a; III-F-8; Appendices C-I and C-II
Approved agent(s)/material(s): Dictyostelium discoideum; Toxoplasma gondii, Klebsiella aerogenes; E. coli K-12; E. coli BL21; Cell lines of D. discoideum; Cell lines of T. gondii; Human cell lines

II. Developing PHRM-DC-201 as a novel therapeutic agent to treat acute myeloid leukemia (Yi 2025-0067) New protocol.
Presented by: Brandy Burgess

This project investigates a new drug designed to treat acute myeloid leukemia, a fast-growing blood cancer affecting children and adults. Current therapies can be harsh, cause serious side effects, and are not always effective. Early studies suggest the compound may stop leukemia cell growth. Animal testing will assess how the drug works in the body, safe dosage levels, and its effectiveness against cancer. Results will provide essential data for future patient trials and may lead to safer, more effective treatments that improve survival and quality of life, with potential applications to other cancers.

Training requirements are up to date for all personnel.
Labs in compliance with the NIH guidelines.

Discussion/Recommendations points:
The committee voted to approve the protocol with the following revisions:

1. Page 1 – Correct the type in the title.
2. Page 6 – Technical Synopsis - #12 – List the *"effective disinfectants*
3. Page 7 - # 6 – Add III-D-3
4. Page 13 and 14 - #27 and # 29 – in 27 safety glasses are mentioned and in 30 face shield is mentioned. Please revise.
5. Page 14 – Remove 01/10/2022 from the Co-PI line. Provide the BBP training date for Jin Yan. Please make sure is up to date. This training is required for approval.
6. Page 16 - #8 – Please check "yes"

VOTE			
Approved: 12	Against: **0**	Abstain: **0**	Tabled: **0**

PI will be notified of the committee's request for modifications.

Protocol approved for:
Biosafety Level: rDNA BL1, rDNA BL2, BSL-1, BSL-2
Animal Biosafety Level: ABSL-2
Greenhouse Biosafety Level: N/A
Applicable NIH Guidelines: III-D-4-a; III-D-3; III-F-8; Appendix C-II
Approved agent(s)/material(s): *E. coli* K-12; Human cells; Lentivirus 3rd generation

III. Examining the intersection of astroglial and cholinergic signaling in motivated behaviors (Kim 2025-0068) New protocol
Presented by: Eric Lafontaine

This project examines how different brain cells contribute to motivated behaviors and their role in psychiatric disorders. Drug addiction involves excessive motivation to seek harmful substances, while depression and anxiety often involve reduced motivation for daily tasks. Using specialized mice, brain activity is monitored during tasks such as drug-seeking or after stress. By tracking how cell activity changes, the research aims to clarify how motivation is regulated in the brain. Findings may inform development of improved treatments for neuropsychiatric disorders, enhancing mental health and quality of life.

Training requirements are up to date for all personnel.
The lab is in the process of being set up and will be inspected prior to the initiation of work.

Discussion/Recommendations points:
The committee voted to approve the protocol with the following revisions:

1. Page 6 – Technical Synopsis – Please indicate that all recombinant waste from the animal room will be decontaminated before disposal.

VOTE			
Approved: 12	Against: **0**	Abstain: **0**	Tabled: **0**

PI will be notified of the committee's request for modifications.

Protocol approved for:
Biosafety Level: rDNA BL1, BSL-1
Animal Biosafety Level: ABSL-1
Greenhouse Biosafety Level: N/A
Applicable NIH Guidelines: III-D-4; III-D-4-c-(2); III-E-3-a; Appendices C-VII, G-III-M
Approved agent(s)/material(s): Adeno-associated viral vectors (AAV)

IV. 1. Molecular Determinants of Entorhinal Cortex Vulnerability and Resilience Across the Lifespan 2. Resilience and Vulnerability Across the Lifespan (Ananth 2025-0071) New protocol
Presented by: Debra Mohnen

This project studies how brain cells change with age, focusing on the entorhinal cortex, a region critical for memory and learning. In Alzheimer's disease, cells in this area are damaged, while in individuals with exceptional memory late in life, these cells remain healthy. Using safe laboratory methods, molecules are delivered into entorhinal cortex cells to track and study their activity. Findings aim to explain why some cells are more resilient than others and may lead to new strategies to protect brain health and preserve memory as people age.

Training requirements are up to date for all personnel.
The lab is in the process of being set up and will be inspected prior to the initiation of work.

Discussion/Recommendations points:

The committee voted to approve the protocol with the following revisions:

1. Page 5 – Non-technical synopsis – Provide a clear statement of the final goal
2. Page 6 – Technical synopsis –
    a. Explain what is "*Neural circuit tracing*"
    b. Define all abbreviations upon first use.
3. Clarify why rabies-infected mouse tissues are handled under ABSL-1 and pseudotyped rabies vectors under BSL-1, with supporting documentation.
4. Page 7 – Part C – Please mark "yes"
5. Page 8 - # 8 – Provide the names of the functional genes
6. Page 8 - # 11 – Please mark "yes"

VOTE			
Approved: 12	Against: **0**	Abstain: **0**	Tabled: **0**

PI will be notified of the committee's request for modifications.

Protocol approved for:

Biosafety Level: rDNA BL1, BSL-1

Animal Biosafety Level: ABSL-1

Greenhouse Biosafety Level: N/A

Applicable NIH Guidelines: III-D-4-c-(2); III-E-3-a; Appendices C-VII, G-III-M

Approved agent(s)/material(s): AAV vectors; Rabies virus EnvA-pSAD(Delta G)-RV; Tissue from rabies virus-injected mice

V. Genetic manipulation of endophytic fungi to understand grass-fungus symbiosis (Wallace J 2025-0077) New protocol.
Presented by: Brian Kvitko

This project investigates fungal endophytes in grasses, focusing on species in the genus Epichloe such as E. coenophiala and E. festucae. Endophytes can act as pathogens, harmless residents, or beneficial partners, but the factors that determine these roles remain unclear. To study them, endophytes will be transformed with visual marker genes (fluorescent proteins and RUBY pigment) for easier tracking inside plants. Constructs will be built using E. coli and disarmed Agrobacterium, and key symbiosis genes will be knocked out to identify their importance in

beneficial interactions. Transformed fungi, including those with hygromycin resistance for recovery, will be re-introduced into host grasses to observe growth and effects on plant health.

Training requirements are up to date for all personnel.
Labs in compliance with the NIH guidelines.

Discussion/Recommendations points:
The committee voted to approve the protocol with the following revisions:

1. Page 8 - #8 – Please indicate that genes will be provided to the Office of Biosafety as they become available.

VOTE			
Approved: 12	Against: **0**	Abstain: **0**	Tabled: **0**

PI will be notified of the committee's request for modifications.

Protocol approved for:
Biosafety Level: rDNA BL1, rDNA BL2
Animal Biosafety Level: N/A
Greenhouse Biosafety Level: rDNA BL1-P, BSL-1P
Applicable NIH Guidelines: III-D-5; III-E-2-a; III-F-8; Appendices C-II, L-I, L-II-A, and L-III
Approved agent(s)/material(s): *Epichloë spp (*natural isolates including *E. coenophiala, E. festucae,* and minor species)*.; Agrobacterium tumefaciens GV3101, EHA105; E. coli* K-12; Fungal endophytes (Epic*hloë spp.);* Seedlings and tissue culture callus; Plants/plant tissues

VI. 1. In vitro cultures of Plasmodium falciparum, with assays for infectivity in mosquitoes 2. "Cryopreservation of Human Erythrocytes as a New Strategy to Mitigate Donor Variability and Oscillations in Mosquito Infectivity During Controlled Human Malaria" (Pathak 2025-0078) New protocol
Presented by: Eric Lafontaine

This project addresses Plasmodium falciparum, the deadliest malaria parasite responsible for hundreds of millions of cases and ~600,000 deaths annually, primarily in young children. While vaccines provide hope, they are not fully effective, and continued research is needed.

The goal is to ensure consistent availability of P. falciparum-infected mosquitoes by building on established methods for in vitro parasite culture and infection. A novel approach allows donor blood to be frozen in small batches and thawed as needed to support parasite growth. The study will compare parasite growth in blood from different donors and test infectivity in mosquitoes.

Outcomes are expected to identify donor blood that reliably supports parasite growth and infection, providing insight into biological factors that influence parasite success. These findings, combined with long-term storage methods, will help collaborators maintain a steady supply of

infected mosquitoes for clinical trials of malaria drugs and vaccines, supporting efforts to reduce global disease burden.
Training requirements are up to date for all personnel.
Labs in compliance with the NIH guidelines.

Discussion/Recommendations points:

The committee voted to approve the protocol with the following revisions:

1. Page 6 – Technical Synopsis – Please provide information on the work involving infected mosquitoes.
2. Page 8 - #11 – Please check "yes"
3. Page 14- #30 – Please provide BBP training date. It must be current, as this training is required for protocol approval.

VOTE			
Approved: 12	Against: **0**	Abstain: **0**	Tabled: **0**

PI will be notified of the committee's request for modifications.

Protocol approved for:

Biosafety Level: rDNA BL2, BSL-2

Animal Biosafety Level: N/A

Greenhouse Biosafety Level: N/A

Applicable NIH Guidelines: III-F-3; III-D-4

Approved agent(s)/material(s): *Plasmodium falciparum;* Genetically modified *P. falciparum* strain (provided by Dr. Shinya Miyazaki, IBC 2103111715-14, approval date: 8/18/2025); Human red blood cells (RBCs); Mosquitoes

3. New Business

I. **The next IBC meeting will be on Thursday, December 11, 2025, from 12:00 pm to 2:00 pm.** The meeting will be held at Tucker Hall, Conference Room 124.

4. Old Business

I. **Update on protocols reviewed at September's meeting** –
   a. Revisions for protocols reviewed at September's IBC meeting have been received, except for Grimsey 2025-0072.

II. **Incident Reports - None**

For the Good of the Order: The meeting adjourned at 1:02 PM