

**Voting Members Present:**

A-ME (Chair)  
K-BIOL (Interim Chair)  
K-EHS  
T-ORIA  
KA-ORIA  
D-NAM  
K-NAM  
S-BME  
S-BIOL  
M-ORIA

**Voting Members Absent:****Non-voting Attendees:**

M-OGC  
KS-ORIA  
P-ORIA

The full Committee roster is posted publicly on the Georgia Tech website. All requests from the public to join a Georgia Tech IBC meeting are considered upon request. No such requests were received for this meeting.

1. **A quorum being present, the meeting was called to order at 10:00 am.**
2. **Approval of April 9, 2026, Minutes**  
The April IBC minutes were sent to the committee for review. No modifications were requested.

**Motion: Approve the minutes as written.**

**Approve: Seven**

**Disapprove: none**

**Abstain: Three**

3. **Registrations/Amendments for Discussion at Today's Meeting**

DIGGLE-R100010 (Renewal)

Title: Understanding Molecular Mechanisms Governing Virulence and biofilm formation in *Pseudomonas aeruginosa*, *Staphylococcus aureus* and *Burkholderia cenocepacia*

Funding: NIH, NSF, Cystic Fibrosis Fnd, Discretionary

Category: Non-Exempt, BSL-2, Section III-D-1, III-D-2.

Discussion Leaders: A-ME, K-NAM

The Committee and BSO reviewed this renewal submission and evaluated the risk assessment and proposed biocontainment plan. The goal of the proposed work is to investigate the fitness, virulence, and antibiotic resistance mechanisms of opportunistic pathogens, with primary focus on *Pseudomonas aeruginosa* (Pa), alongside studies of *Staphylococcus aureus* (Sa) and *Burkholderia cenocepacia* (Bc). The proposed use of

marker proteins, reporter genes and antibiotic genes indicates that this work should be classified as Non-Exempt, BSL-2, Section III-D-1, III-D-2. The Committee found that the facilities, procedures, practices, training, and expertise of personnel described in this protocol are appropriate for the proposed work. The PI has identified the potential risks involved with this research and has included plans to mitigate such risks that are suitable for the research described. The Committee requests that the PI confirm that samples will be handled within a biosafety cabinet.

**Motion: Approve protocol once the PI addresses the committee's comment regarding containment.**

**Approve: Nine**

**Disapprove: none**

**Abstain: none**

STORICI-R100098 (Renewal)

Title: Mechanisms of DNA Repair and Gene Targeting

Funding: Univ Kansas Med Cen Aux Inc, Univ Texas San Antonio, Tulane Univ, Discretionary

Category: Non-Exempt, BSL-2, Section III-E-1 and III-F-1 through III-F-8

Discussion Leaders: S-BME, K-EHS

The Committee and BSO reviewed this renewal submission and evaluated the risk assessment and proposed biocontainment plan. The goal of the proposed work is to induce targeted Double Strand Breaks (DSB) within mutations that disrupt the interaction site of the RAD52-RPA complex using a yeast model system and bacteria, characterize ribonucleoside 5'-monophosphates (rNMPs) that are 'mis-incorporated' by DNA polymerases during replication within the telomere in the yeast model system and mammalian cell lines and characterize the variants of DNA Polymerase Epsilon (POLE). The proposed use of protein markers, genomic editing components, chloride channels, endonucleases subunit of Cohesin complex, assembly connectors, promoter elements, affinity tags, origin markers, gene silencing components, genetic editing components and 5' and 3' long terminal repeats indicates that this work should be classified as Non-Exempt, BSL-2, Section III-E-1 and III-F-1 through III-F-8. The Committee found that the facilities, procedures, practices, training, and expertise of personnel described in this protocol are appropriate for the proposed work. The PI has identified the potential risks involved with this research and has included plans to mitigate such risks that are suitable for the research described. The Committee had no concerns with this protocol.

**Motion: Approve the protocol as written.**

**Approve: Ten**

**Disapprove: none**

**Abstain: none**

KROUT-R100301 (New)

Title: Optogenetics on *Drosophila melanogaster* in Teaching labs

Funding: Discretionary

Category: Non-Exempt, BSL-2, ABSL-1, Section III-D-4-b

Discussion Leaders: K-BIOL, K-ORIA

The Committee and BSO reviewed this protocol submission and evaluated the risk assessment and proposed biocontainment plan. The goal of the proposed work is to use genetically modified flies (*Drosophila melanogaster*) to demonstrate a common neuroscience technique used to activate or deactivate cells in an organism utilizing light-activated channel rhodopsins as a teaching exercise. There is no proposed use of additional recombinant and/or synthetic nucleic materials; therefore, this work should be classified as Non-Exempt, BSL-2, ABSL-1, Section III-D-4-b. The Committee found that the facilities, procedures, practices, training, and expertise of personnel described on this protocol are appropriate for the proposed work. The PI has identified the potential risks involved with this research and has included plans to mitigate such risks that are suitable for the research described. The Committee had no concerns with this protocol.

**Motion: Approve the protocol as written.**

**Approve: Ten**

**Disapprove: none**

**Abstain: none**

KIM-R100319 (New)

Title: Machine Perception-Enabled Nanosensors Utilizing Synthetic Nucleic Acids for In Vivo Autophagic Monitoring in Human Cancer Models

Funding: NIH

Category: Non-Exempt, BSL-2, ABSL-1, Section III-D-2-a, III-D-4-a

Discussion Leaders: S-BME, T-ORIA

The Committee and BSO reviewed this protocol submission and evaluated the risk assessment and proposed biocontainment plan. The goal of the proposed work is to engineer nanosensors, use CRISPER/Cas9 gene editing to create reporter cells that assess nanosensor cell health and stress levels, and use nanosensors to undergo tumor monitoring to see how cancer drugs work in a complex, living system. The proposed use of DNA-cleaving enzymes, synthetic vectors and synthetic DNA indicates that this work should be classified as Non-Exempt, BSL-2, ABSL-1, Section III-D-2-a, III-D-4-a. The Committee found that the facilities, procedures, practices, training, and expertise of personnel described in this protocol are appropriate for the proposed work. The PI has identified the potential risks involved with this research and has included plans to mitigate such risks that are suitable for the research described. The Committee requests clarity on the types of genes and reporters the PI plans to focus on changing. Also, the committee would like clarification on some inconsistencies, including the mention of ABSL-2 containment when most work appears to qualify as ABSL-1 containment work and the mention of possible E. coli use without it being listed as a material.

**Motion: Send protocol back to the PI for clarification, then to the DMRs for further review.**

**Approve: Ten**

**Disapprove: none**

**Abstain: none**

GARCIA-R100008 (Renewal)

Title: Stem cell survival and engraftment

Funding: NIH, Discretionary

Category: Non-Exempt, BSL-2, ABSL-1, Sections III-D-1-a, III-D-3-a

Discussion Leaders: S-BIOL, D-NAM

The Committee and BSO reviewed this renewal submission and evaluated the risk assessment and proposed biocontainment plan. The goal of the proposed work is to track the survival and engraftment of mesenchymal stem cells and fibroblasts in vivo during immune responses and bone repair using luciferase labeling and biomaterial scaffolds. The proposed use of reporter and marker proteins indicates this work should be classified as Non-Exempt, BSL-2, ABSL-1, Sections III-D-1-a, III-D-3-a. The Committee found that the facilities, procedures, practices, training, and expertise of personnel described on this protocol are appropriate for the proposed work. The PI has identified the potential risks involved with this research and has included plans to mitigate such risks that are suitable for the research described. The Committee had no concerns about this protocol.

**Motion: Approve the protocol as written.**

**Approve: Nine**

**Disapprove: none**

**Abstain: none**

#### 4. Items not requiring committee discussion or review

The Committee has been provided with a list of protocols, amendments, and renewals to IBC registrations which were approved at or since the last Biosafety Committee meeting (including items exempt from the *NIH Guidelines*). The Committee was also provided with a list of registrations which were withdrawn, expired, or closed since the last Biosafety Committee meeting.

#### 5. Other business

- **June Meeting:**

- ORIA asked the committee whether a change in the next meeting date would better ensure quorum.

- The committee chose a later meeting date.

**Next meeting** June 11, 2026