Georgia Institute of Technology
Institutional Biosafety Committee
Meeting Minutes
June 5, 2025
10:00 AM

Voting Members Present:

K-BIOL (Interim Chair)
D-NAM
T-ORIA
K-NAM
M-ORIA
S-BIOL
K-EHS (Arrived after the approval of the minutes)

Voting Members Absent:

A, School of Mechanical Engineering
S, School of Biomedical Engineering

Non-voting Attendees:

KS, Office of Research Integrity Assurance
KA, Office of Research Integrity Assurance
J, Office of General Counsel

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 10:01 am.**

2. **Approval of May 1, 2025 Minutes**
The May 1st meeting minutes were sent to the Committee for review before the meeting. One small typo was noted and corrected.
Motion: Approve the minutes as modified.
Approve: Six **Disapprove: none** **Abstain: One**

3. **Registrations/Amendments for Discussion at Today's Meeting**
SINGER-R100067 (renewal)
Title: Assessing effects of optogenetic stimulation in hippocampal formation and related regions in vivo
Funding: NIH
Category: Non-exempt, BSL-2, ABSL-1, Sections III-E-1 and III-D-4
Discussion Leaders: K-NAM, K-EH&S
The Committee and biological safety officer (BSO) reviewed this renewal submission and evaluated the risk assessment and proposed biocontainment plan. The submission proposed to study neurons by incorporating light sensitive channels in vivo via viral vectors. These studies will allow the researchers to examine how specific patterns of activity affect the activity of downstream cells as well as how they affect other cellular and molecular processes. The proposed use of adeno-associated virus (AAV) combined with sensor, reporter, and channelrhodopsin sequences in vivo indicates that this work should be classified as non-exempt, BSL-2, ABSL-1 work per NIH Guidelines Section III-D-4 and Section III-E-1. 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 risk that are suitable for the research described. The one exception to this was the lack of a biosafety cabinet (BSC) proposed for the use of lipopolysaccharides (LPS), which the Committee requested be added to the submission.
Motion: Return to PI to address minor modification and then return to original reviewers for approval
Approve: unanimous **Disapprove: none** **Abstain: none**

CHAMPION-R100048 (renewal)
Title: Development of Platform for Universal Influenza Vaccine and Chlamydia Vaccine
Funding: Discretionary
Category: Non-exempt, BSL-2, Sections III-D-1a, III-D-2-a, III-E
Discussion Leaders: T-ORIA, K-BIOL

The Committee and BSO reviewed this renewal submission and evaluated the risk assessment and proposed biocontainment plan. The proposed work involves development of protein-based nanoparticle vaccines incorporated with pathogen antigens in vivo. Specifically, the researchers are trying to develop a universal influenza vaccine as well as a vaccine against chlamydia. The proposed viral antigens, transcription factors, planned expression vectors, and in vivo model indicate that this work should be classified as non-exempt, BSL-2 work per NIH Guidelines Section III-D-1a, III-D-2, and III-E. 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 risk that are suitable for the research described. The one exception to this was that the risk assessment lacked details related to in vivo work, which the Committee requested be added to the submission.
Motion: Return to PI to address minor modification and then return to original reviewers for approval
Approve: unanimous **Disapprove: none** **Abstain: none**

LU-R100012 (renewal)
Title: Neurogenetics of learning, behavioral dynamics, sensorimotor integration, neural development, and aging in C. elegans
Funding: NIH, Harvard University
Category: Non-exempt, BSL-2, Sections III-D-4, III-E, III-F-8 (Appendix C-II)
Discussion Leaders: S-BIOL, D-NAM

The Committee and BSO reviewed this renewal submission and evaluated the risk assessment and proposed biocontainment plan. This renewal protocol proposes to study mechanosensation, neural basis of behavior, and neural development in vivo. The proposed use of marker proteins, nucleic acid sequences, and vectors, in conjunction with planned in vivo manipulations indicate that this work should be classified as non-exempt, BSL-2 work per NIH Guidelines Sections III-D-4, III-E, and III-F-8 (appendix C-II). 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 risk that are suitable for the research described.
Motion: Approve the renewal protocol.
Approve: unanimous **Disapprove: none** **Abstain: none**

PERALTA-YAHYA-R100145 (renewal)
Title: Lignin-derived polymer monomers
Funding: Discretionary
Category: Non-exempt, BSL-1, Sections III-E, III-F-8 (Appendix C-II)
Discussion Leaders: K-EH&S, M-ORIA

The Committee and BSO reviewed this renewal submission and evaluated the risk assessment and proposed biocontainment plan. The submission proposes to develop methods to convert lignin monomers to polymers using non-pathogenic bacteria. The proposed use of marker proteins, enzymes, expression vectors, and transcription systems indicate that this work should be classified as non-exempt, BSL-1 work per NIH

Guidelines Sections III-E, III-F-8 (Appendix C-II). The Committee indicated that additional information should be added to detail how the relevant section was selected. Other than this minor detail, 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 risk that are suitable for the research described.
Motion: Return to PI to address minor modification and then return to original reviewers for approval
Approve: unanimous **Disapprove: none** **Abstain: none**

MARKOWITZ-R100143 (renewal)
Title: Using closed-loop neuromodulation to understand the principles of action selection
Funding: Burroughs Wellcome Fund, Sloan Foundation, Packard Foundation, Discretionary
Category: Non-exempt, BSL-2, ABSL-1, Section III-D
Discussion Leaders: K-BIOL, S-BIOL

The Committee and BSO reviewed this renewal submission and evaluated the risk assessment and proposed biocontainment plan. The proposed work involves studying anatomical pathways by performing functional experiments in vivo after genes of interest have been delivered via viral vectors. The proposed marker proteins, reporter proteins, cell lines, vectors, in combination with in vivo work using AAV indicate that this work should be classified as non-exempt, BSL-2, ABSL-1 work per NIH Guidelines Section III-D. 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 risk that are suitable for the research described.
Motion: Approve the renewal protocol.
Approve: unanimous **Disapprove: none** **Abstain: none**

SPENCER-R100264 (new protocol)
Title: Transforming Bacteria for Expression of PETase for Polyester Textile Degradation
Funding: Discretionary
Category: Non-exempt, BSL-1, Section III-E
Discussion Leaders: M-ORIA, T-ORIA

The Committee and BSO reviewed this new submission and evaluated the risk assessment and proposed biocontainment plan. The proposed work aims to develop methods to break down plastics using non-pathogenic bacteria. The proposed enzymes, expression vectors, and planned manipulations in the specified bacteria indicate that this work should be classified as non-exempt, BSL-1 work per NIH Guidelines Section III-E. During discussion, the Committee indicated a request for additional detail on the selected NIH citation. 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 risk that are suitable for the research described. The Committee did note that some details on this risk assessment might not be complete, and requested that the PI revise the risk assessment accordingly.
Motion: Return to PI to address minor modifications and then return to original reviewers for approval
Approve: unanimous **Disapprove: none** **Abstain: none**

TEMENOFF-R100146 (renewal)
Title: Characterization of cells in RMIP funded clinical studies by the GT In-Depth Cell Characterization (IDCC) Platform Hub.
Funding: University of Maryland, Marcus Foundation
Category: Non-exempt, BSL-2, Sections III-D-1-a, III-E-1
Discussion Leaders: D-NAM, K-NAM

The Committee and BSO reviewed this renewal submission and evaluated the risk assessment and proposed biocontainment plan. The proposed work involves receipt and characterization of collaborator-

generated cell lines using recombinant DNA technologies, as well as including related cell-based products in clinical trials, with no further recombinant modification of received cells. The proposed cell lines, genes of interest, vectors used for gene modification, and planned assays indicate that this work should be classified as non-exempt, BSL-2 work per NIH Guidelines Section III-D-1a and III-E-1. The Committee found that the facilities, procedures, practices, training, and expertise of personnel described on this protocol are appropriate for the proposed work. This protocol has a fairly broad scope, so the Committee requested additional clarification in the general project description to include more details on selected assays which may be done. The PI has identified the potential risks involved with this research and has included plans to mitigate such risk that are suitable for the research described.

Motion: Return to PI to address minor modification and then return to original reviewers for approval

Approve: unanimous **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**

   The Biosafety Officer updated the Committee about the new guidelines for enrollment in the occupational health program (BOHP), noting that now only personnel working with either animals or human-sourced materials will be required to enroll. However, anyone who wishes to enroll may do so on a voluntary basis.

6. **Having no further business, this meeting was adjourned at 10:46 am**

Next meeting July 3, 2025