

**Marquette University
Office of Research Compliance
Institutional Biosafety Committee (IBC)**

MINUTES

IBC Member Roster: Austin Fritsch (Voting Contact), Dennis Daye (Member), Michael Schlappi (Plant Expert), Murray Blackmore (Chair, Animal Expert), Edward M. Blumenthal (Member, Vice Chair), M. Behnam Ghasemzadeh (Animal Expert), Jason M. Keaton (Biosafety Officer), Allison E. Reeme (Member), Jerome Donohoe (Non-Affiliated), Eli Colina (Non-Affiliated), Rebecca A. Seevers (Non-Affiliated), Alicja Czyz (Non-Voting Member)

Present: Dennis Daye (Member), Murray Blackmore (Chair, Animal Expert), Edward M. Blumenthal (Member, Vice Chair), M. Behnam Ghasemzadeh (Animal Expert), Jason M. Keaton (Biosafety Officer), Jerome Donohoe (Non-Affiliated), Eli Colina (Non-Affiliated), Rebecca A. Seevers (Non-Affiliated), Alicja Czyz (Non-Voting Member)

Absent: Michael Schlappi (Plant Expert), Allison E. Reeme (Member), Austin Fritsch (Voting Contact)

Guests: Samantha Juedemann (Mayer Lab Representative)

- I. MEETING DATE:** April 15th, 2026
- II. MEETING TYPE:** In-Person
- III. MEETING STATUS:** Open
- IV. QUORUM:** Present
- V. CALL TO ORDER:** 11:00 AM
- VI. CONFLICT OF INTEREST:** No conflicts of interest were observed.
- VII. ANNOUNCEMENTS:** N/A
- VIII. REVIEW MEETING MINUTES**
 - A.** March 2026 Meeting Minutes
 - i.** Motion to approve the March 2026 IBC meeting minutes as written:
 - Approve: 7, Deny: 0, Abstain, 0
- IX. NEW PROTOCOL(S)**
 - A.** N/A
- X. NEW PROTOCOL(S)**
 - A.** N/A
- XI. THREE YEAR RENEWAL(S)**
 - A.** Brooke Mayer, CCEE; #5358: "Multiple projects on Electrocoagulation/electrooxidation of BSL1 bacteriophages: 1) FRP: Electrocoagulation for the mitigation of emerging biological and chemical

contaminants, 2) Novel electro-treatment for the mitigation of endocrine-disrupting compounds and viruses in drinking water (formerly BR-148)"

- i. Project Overview: Samantha explained that the objective of this project is to assess the effectiveness of electrochemical water treatment for reducing virus presence. The viruses utilized in the proposed research consist of adenovirus type 4, VR-1572; echovirus type 12, ATCC VR-1563; and feline calicivirus, VR-652. The viruses were commercially sources and originally isolated from an infected patient, an existing strain, and a cat infected with panleukopenia, respectively and pose a moderate risk of causing human disease. For this reason, they are handled at BSL-2. The cell lines utilized in the project consist of cell culture A549 (CCL-185), BGM (PTA-4594) and CRFK (CCL-94), which serve as the host for the above-mentioned viruses. A549 (CCL-185) is rated as a risk group 2 (RG1) organism while BGM (PTA-4594) and CRFK (CCL-94) are rated as RG2 in accordance with their risk of causing disease in humans. All materials will be handled at BSL2 and follow the recommended procedures for this biosafety level. The types of manipulations planned consist of propagations, electrocoagulation and electrooxidation experiments, UV disinfections, chemical oxidation disinfection experiments, as well as in-vitro cell culture assays for quantification of infectious viruses. No recombinant or synthetic nucleic acid sequences are used in the project, and no attempts will be made to obtain expression of a transgene.

ii. **Discussion:**

- **Training verification:** The committee reviewed the training of the listed personnel and determined that everyone is appropriately trained.
- **Applicable section(s) of the NIH Guidelines:** The committee determined that the NIH Guidelines are not applicable to the proposed research

iii. **Required Changes**

- **"Personnel" Section:**
 - Please provide a definitive statement conveying that all individuals listed on the protocol will complete lab-specific training prior to the initiation of the procedures described in the registration.
- **"Project Details" Section:**
 - Please update listed protocol numbers from the old format to the new format.
 - Please make sure that a copy if the registration is available in the red safety binder, and include a signoff sheet that can be signed by those working on the registration to document that they are familiar with the described procedures.

- iv. Motion to send Dr. Mayer a list of required changes to later be reviewed by a designated reviewer:
- Approve: 8, Deny: 0, Abstain: 0
 - Conflicts of interest: None
- B. Brooke Mayer, CCEE; #5357: "Multiple projects on Electrocoagulation/electrooxidation of BSL1 bacteriophages: 1) FRP: Electrocoagulation for the mitigation of emerging biological and chemical contaminants, 2) Novel electro-treatment for the mitigation of endocrine-disrupting compounds and viruses in drinking water (formerly BR-147)
- i. Project Overview: Samantha explained that the objective of this project is to assess the effectiveness of electrochemical water treatment for reducing bacteriophage presence. Most of the host bacteria (*Escherichia coli* strains 15597, 19853, 13706, 23631 which are derived from the *E. coli* K-12 strain, and the plant pathogen *Pseudomonas syringae*. (DSM 21482, HER 1102)) as well as the bacteriophages used to infect the hosts (bacteriophages MS2, fr, phi-X174, Q β , phi-6, and P22) utilized in the project can be handled at BSL-1 because they pose minimal risk in the laboratory setting. The only exception is the *Salmonella typhimurium* cell culture used as the host for bacteriophage P22, which must be handled at BSL-2 due to its potential to cause disease in humans. The *Salmonella typhimurium* cell culture is stored in a designated BSL-2 area, which is separated from the rest of the lab and follows the BSL-2 containment requirements. The types of manipulations planned consist of propagations, electrocoagulation and electrooxidation experiments, as well as bacteriophage analyses using the double agar layer protocol. No recombinant or synthetic nucleic acid sequences are used in the project, and no attempts will be made to obtain expression of a transgene.
- ii. **Discussion:**
- **Training verification:** The committee reviewed the training of the listed personnel and determined that everyone is appropriately trained.
 - **Applicable section(s) of the NIH Guidelines:** The committee determined that the NIH Guidelines are not applicable to the proposed research
 - **Personnel Access and Training:** It was noted that access to the BSL-2 cell culture is restricted to graduate students and lab staff, while undergraduates are only allowed to work with BSL1 agents. The committee clarified that this separation is maintained for biosafety and regulatory reasons.
 - **Lab Training Documentation and Oversight:** Committee members debated requirements for documenting lab-specific and general safety training and the extent of IBC oversight.
 - **Training Record Requirements:** The committee discussed whether training records should be listed in the

online IBC registration, noting that while lab-specific training is documented and occurs, records for PIs and staff are only available in paper format. It was determined that a definitive statement of training within the IBC registration suffices, without requiring all records to be attached.

- **Distinction Between General and Lab-Specific Training:** The committee clarified the difference between general Environmental Health and Safety (EH&S) training (e.g., eyewash, fire extinguisher, chemical hygiene) and lab-specific training (e.g., experimental procedures, PPE use, waste disposal procedures). It was noted that completion of lab-specific training is documented in the biosafety training checklist which must be completed by all individuals that are to be listed as personnel on an IBC registration.
- **Laboratory Safety Manual and Protocol Attachment:** The committee discussed the federal requirement for a laboratory safety manual for BSL2 work, debating whether this document should be separate from the registration and lab safety manual. It was determined that the registration itself can serve as the safety manual, as it contains all the descriptions of the necessary procedures. It was determined that including the registration in the lab safety binder with a sign-off sheet satisfies the federal requirements.
- **Kuali Confirmation of Training Completion:** The committee suggested that the IBC registration template can be modified to include a question asking whether those working on the project completed lab-specific training as well as EH&S training.
- **Post Approval Monitoring:** The committee discussed the development of a post approval monitoring system for IBC registrations.

iii.

Required Changes

- **“Personnel” Section:**
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 - Please update listed protocol numbers from the old format to the new format.
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can be signed by those working on the registration to document that they are familiar with the described procedures.

- iv. Motion to send Dr. Mayer a list of required changes to later be reviewed by a designated reviewer:

- Approve: 8, Deny: 0, Abstain: 0
- Conflicts of interest: None

XII. MODIFICATION(S)

- i. N/A

XIII. DESIGNATED REVIEW(S)

- A. New protocol(s)

- i. N/A

- B. Three year renewal(s)

- i. N/A

- C. Modification(s)

- i. Murray Blackmore, BISC; #4598: "Combinatorial Manipulation of Transcription Factors to Promote CNS Regeneration"

- ii. Nick Raddatz, BISC; #5129: "The Role of Extrasynaptic Glutamate Transmission in Neuron-Astrocyte Communication"

XIV. TERMINATION(S)

- A. N/A

XV. ADDITIONAL BUSINESS

- A. **Lab Access and Door Closure Policy:** The committee reviewed the revised version of the Lab Access and Door Closure Policy. Changes consisted of specifying that the policy is a collaborative document between the IBC, Animal Care and Use Committee (IACUC), and EH&S, separation of BSL-1 and BLS-2 requirements, and minor language changes.

XVI. TRAINING

- A. N/A

XVII. PUBLIC COMMENTS

- A. N/A

XVIII. INSPECTIONS/ONGOING OVERSIGHT

- A. N/A

XIX. ADJOURN 12:00 PM