



INSTITUTIONAL BIOSAFETY COMMITTEE (IBC)

Meeting Minutes

May 5, 2025, 1:00 PM, Zoom

List of 2025 IBC Members

- Adams, Dave
 - IBC Chair and Biosafety Officer
 - Professor Emeritus, Biology and Biotechnology
 - Contact Information: IBC-Chair@wpi.edu
- xx (Community Member)
- xx (EHS Safety Technician)
- xx (Institutional Member, Professor BB)
- xx (Community Member)

Members Present

Adams (Chair and BSO), xx (EHS), xx (External), xx (BB), xx (External) (quorum of ≥ 3 met)

Requirements for Conducting IBC Business

- According to the *NIH Guidelines* (which the City of Worcester requires WPI to follow), each IBC committee decides their own rules for conducting business.
- WPI's IBC agreed in a previous meeting to follow the recommendation of Michelle Johnson-Lancaster (Director of NIH's Office of Science Policy who oversees all IBCs) to **have a minimum of the following members** present to conduct business:
 - Committee Chair and Biosafety Officer
 - At least one community member
 - Scientific expertise to discuss the items at hand
 - Simple quorum (our IBC has **5 members**, so a **quorum is ≥ 3 members**)

Plan for 2025 Form Reviews

- **Information Gathering and Initial Chair Review:**
 - The IBC Chair obtains the following information in advance of contacting bio-related PI's and enters it on the form:
 - **Courses Taught:** Makes a list of the courses taught by each bio-related PI for that year and notes whether the course has a lab component.
 - **Papers Published:** Performs a web search for papers published by each bio-related PI since the last IBC meeting, and determines whether any biological agents were used in the paper.
 - **IACUC Protocols:** Performs a search of WPI's IACUC folders (the IBC Chair is also a member of IACUC) to determine which bio-related PI's have approved or expired IACUC protocols for working with vertebrates. IACUC and the IBC share responsibility for experiments in which biological agents are used in vertebrates.
 - The Chair lists the new information on the declaration form (in a different colored font to allow easy identification by the committee members).
 - The Chair contacts each PI to show them the information obtained for their lab and to obtain any new information they need to declare.
 - The Chair helps the PI add that information to the form.
 - The Chair briefly summarizes the new information at the beginning of each form, and also in a **summary file** to be presented at the IBC meetings to initiate discussion.

- When the Chair is done with the initial information gathering, he places his initials at the end of the filename (so the committee members know that file is ready for a review), places the files on the IBC share-drive, and notifies committee members they are ready for review.
- **Committee Member Reviews:**
 - Committee members review the forms (or the Chair's summary file).
 - Members email any comments directly to the Chair to ensure they are seen (the files themselves may be in view-only mode).
 - The Chair summarizes the member comments in the summary file for committee discussion.
- **Meeting Discussions:**
 - During the IBC meetings, the IBC Chair uses the summary file to discuss new information, new questions from committee members, or important information from last year.
 - In some cases, further research is required to answer a question, so the committee formulates a plan to obtain that information from the PI or from published articles.
 - The Chair adds any new information to the forms.
- **Minutes:**
 - The Chair briefly summarizes the major discussion items from each meeting, and lists which forms were reviewed.

IBC Lab Declaration Form Reviews

- At this **May meeting**, the committee:
 - **Approved** the prior meeting minutes.
 - **Reviewed and approved** the following IBC Declaration Forms and Control Plans:
 - 19 Biology and Biotechnology (BB)

Special Discussion Points

- **Discussion of the Increase of Highly Pathogenic Avian Influenza (HPAI) in Massachusetts:**
 - The committee discussed a PI's field bird-banding experiments and what to do if highly pathogenic avian influenza (HPAI) continues to expand in Massachusetts.
 - The committee decided to recommend informing all of the PI's field personnel of the continuing HPAI expansion, increasing their use of gloves when bird banding, increasing the frequency of hand washing, not allowing personnel with cuts or abrasions to handle birds, and wearing face masks over the mouth and nose.
- **Classification of *Mycobacterium smegmatis*:**
 - The committee discussed the classification of a previously-declared RG-1 *Mycobacterium smegmatis*, given new information that it is classified as RG-2 by the Public Health Agency of Canada.
 - RG-2 would mean it causes disease in healthy humans, but this agent is not classified as any kind of pathogen by NIH or BMBL, and ATCC classifies it as RG-1 saying it is generally safe to handle and is non-pathogenic in humans.
 - This agent is frequently used as an RG-1 surrogate for RG-3 *Mycobacterium tuberculosis* (attenuated strains are RG-2).
 - The committee decided to leave its designation as RG-1.
- **Dissection of Fixed Tissues:**
 - The committee discussed new information that a class lab dissects fixed tissues given concern about prions potentially residing in neuronal tissue that could be resistant to the fixation process.
 - The committee determined that neuronal tissue is not worked with in the class lab.
- **Experiments with Aquatic Plant *Chara vulgaris*:**
 - The committee discussed new information for a lab using *Chara vulgaris* with respect to whether it is native to North America or is an invasive species which would require special precautions.
 - The committee determined that this species is native to the US, and the PI already declares working at BSL-1 and autoclaving all biowaste with this agent.
- **Classification of *Pseudomonas putida*:**

- The committee discussed the classification of a previously declared RG-1 *Pseudomonas putida* given new information that it can be an opportunistic pathogen.
- The committee decided that all RG agents under the right conditions can be opportunistic pathogens, this particular strain is attenuated (and states so on the declaration form), and the PI already declares that immune-compromised individuals work at BSL-2 with this agent.
- The committee decided there is no reason to boost its classification.
- **Boost of BSL-2+ Cell Line:**
 - The committee decided to boost the safety level of a newly declared cell line that was immortalized using HPV oncogenes E6 and E7.
 - The cell line is a human vaginal epithelial cell-line VK2/E6E7 (ATCC #CRL-2616, ATCC-BSL-2) isolated in 1996 from the mucosa of a 32-year-old, female patient undergoing a hysterectomy for endometriosis, and immortalized using the **E6 and E7 genes (potent viral oncogenes)** of the human papillomavirus (not the full genome).
- **Experiment with Trypanosome DNA:**
 - The committee discussed a recent PI publication that used PCR-RFLP analysis and DNA sequencing to investigate trypanosome-resistance profiles of various chemicals administered by farmers in three regions of northern Côte d'Ivoire, Africa.
 - The committee verified that the trypanosome parasites were not handled at WPI, although the purified DNA (not infectious) was shipped here for use in PCR.
- The Chair **adjourned** the meeting at 2:00 PM.