

University of Toledo  
Institutional Biosafety Committee

**Date:** January 15, 2026

**Meeting time:** 12.00 pm- 2.00 pm

**Meeting type:** Hybrid (Microsoft Teams and HEB 233)

**Attendees/Roster:**

<b>Member</b>	<b>Attended</b>	<b>Voting</b>	<b>Scientific</b>	<b>Affiliated</b>
DeLaSerna, Ivana	Yes	Yes	Yes	Yes
Dinardo, Robert S	Yes	Yes	Yes	No
Dudley, Richard	Yes	Yes	Yes	No
Gray, John	Yes	Yes	Yes	Yes
Kalinoski, Andrea L.	Yes	Yes	Yes	Yes
Leisner, Scott M.	Yes	Yes	Yes	Yes
Peseckis, Steven M.	Yes	Yes	Yes	Yes
Pillai, Mahesh R	Yes	Yes	Yes	Yes
Rohrs, Skylar Lee	Yes	Yes	Yes	Yes
Root, Lisa Jane	Yes	Yes	Yes	Yes
Shemshedini, Lirim	No	Yes	Yes	Yes
Shupp, Andrew Charles (Alt)	No	No	Yes	Yes
Taylor, Roger Travis	Yes	Yes	Yes	Yes
Wooten, Ronald Mark	Yes	Yes	Yes	Yes
IBC staff: Dissanayake, Ravindika				

**Quorum:** Present

*There were (12) voting members present, and (7) members are required to conduct business.*

**Call to Order:** The IBC Chair called the meeting to order at 12.05 pm

**Review and approval of previous minutes:**

**Date of the meeting minutes to be approved.** December 18, 2025

- **Discussion:** None
- **Motion:** The committee approved the unredacted December meeting minutes as written.
- **Votes:** For/Against/Abstain: 12/0/0

**Review of Prior Business/Biosafety officers report:**

- Mr. Rohrs reported [REDACTED]

**Protocol Review**

<b>IBC</b> #500191- New Submission	<b>P.I.:</b> Dr. Andrew Fribley.	<b>Training:</b> IBC Laboratory Safety Training IBC Biosafety Training	<b>Biosafety Level Assignment:</b> BSL-2
<b>Title:</b> Role of mitochondria in cyanotoxin induced hepatotoxicity, liver disease and development of insulin resistance			
<u>Project Overview:</u>  The purpose of this research is to investigate whether cyanotoxins contribute to or exacerbate pre-existing liver damage and disease including diabetes. The objectives of the research team are to 1) identify the inflammatory and fibrotic effects of ingested/aerosolized cyanotoxins and in the liver and other major organs systems such as lungs and liver) and 2a) the effect on mitochondria and mitochondrial products (such as reactive oxygen species and ATP) as well as markers of diabetes and 2b) specific multiomic signatures generated by these toxins with a focus on mitochondrial pathologies associated with diabetes. They are planning to accomplish these objectives by 1) Assessing the hepatic toxicity and-associated markers of cyanotoxins in a hepatocyte cell culture model as well as primary hepatocytes 2)Assessing the effect on these cyanotoxins on the development of insulin resistance in a hepatocyte cell culture model as well as primary hepatocytes. 3) Using previously identified compounds and new ones that can enhance mitochondrial function to ameliorate these toxic effects.			
<u>NIH Guideline Section</u>  NIH guidelines Appendix B-II-A			
<u>Risk Assessment and Discussion</u>  Types of biological hazards associated with this protocol are as follows, <ul style="list-style-type: none"><li>• Purified microcystin toxins</li><li>• Mouse tissues</li><li>• Cultured human hepatocytes cell lines and human lung cell lines.</li><li>• Non-viral vectors</li></ul>			

Potential sources of risk are through aerosols, needle sticks, and biohazard waste disposal. The committee discussed the proposed precautions outlined in the protocol such as PPE requirements, handling of aerosol generating equipment, safe handling and disposal of sharps and determined that the proposed precautions are appropriate and sufficient.

Occupational Health Representative review (if applicable):

- Add contact time for bleach in SOP spill procedure.
- Laboratories must be certified for BSL2
- Contact biosafety officer to request spill kits/certify lab spaces for BSL2

IBC vote:

A member made a motion for Modifications required for approval, then Designated Member Review (Chair, Primary Reviewer and Secondary Reviewer). Another member seconded. The required modifications were:

1. Describe experiments with the vectors and list the vectors in appropriate sections
2. Need an SOP for core facilities and list all the Core facilities in the Location section
3. Source of the mouse and rat tissue needs to be included throughout the protocol
4. Does bleach neutralize the toxins? Explain how bleach can mitigate the risks to the environment
5. Please address how fresh frozen samples (rat & mice) will be handled.
6. Please include how disposal of the BSL2 agents (human cell lines both primary and immortalized) are handled and what PPE will be used.
7. Revise wording in Risk Assessment section
8. Include the risk of using human cell lines (immortalized and primary) which are BSL2.
9. Human cell lines should be BSL2/RG2. Please refer to appendix H of BMBL guideline

Total Votes: 12, For: 12, Against: 0, Abstain: 0

<b>IBC #500190-</b> New Submission	<b>P.I.:</b> Dr. John Wise	<b>Training:</b> IBC Biosafety Training and IBC Laboratory Safety Training	<b>Biosafety Level Assignment:</b> BSL-2
<b>Title:</b> Investigating Cr(VI) Toxicity in CTX-TNA2 Rat Astrocytes			

Project Overview:

The purpose of these experiments is to investigate how Cr(VI) (as sodium chromate) impacts astrocytes, brain endothelial cells, and microglia. Experiments will seek to elucidate underlying toxicology mechanisms. Mechanistic insights generated from these cell culture experiments will be further explored in brain tissues from rodents exposed to Cr(VI) in drinking water.

NIH Guideline Section

Not applicable. Recombinant and Synthetic DNA are not involved

Risk Assessment and Discussion

Types of biological/chemical hazards associated with this protocol are as follows,

- Rat astrocyte
- Human brain endothelial cell line
- Immortalized mouse microglia cell line
- Sodium chromate

Potential sources of risk are through aerosols, needle sticks, and chemical hazard. Sodium chromate is a known human carcinogen, though the concentrations used are very low (0-4 uM) and should pose little to no hazard to individuals working with proper PPE and safety equipment (e.g. biosafety cabinet). Working with human cell lines may present a risk of exposure to bloodborne pathogens, which can infect and cause disease in persons who are exposed to blood containing these pathogens including hepatitis B virus (HBV), hepatitis C virus (HCV), and human immunodeficiency virus (HIV). The committee discussed the proposed precautions outlined in the protocol such as PPE requirements, handling of aerosol generating equipment, safe handling and disposal of sharps and determined that the proposed precautions are appropriate and sufficient.

Occupational Health Representative review (if applicable):

- Lab spaces need to be inspected as BSL2. PI to contact the biosafety officer to schedule inspection.

IBC vote:

A member made a motion for 'Modifications required for approval, then Designated Member Review (Chair only). Another member seconded. The required modifications were:

1. Please ensure mixing of Chromium is performed in a fume hood. Also, make sure if disposal via sink is below EPA requirements, otherwise dispose of it in the chemical waste.
2. List the core facilities that will be used and attach SOPs.
3. Add a sentence about using secondary containers for transporting any BSL2 material

4. Change section C.4 to “no” as you are not using any biological nanoparticles and biotoxins.
5. Include the name of each cell line in table F.1.

Total Votes: 12, For: 12, Against: 0, Abstain: 0

*[Dr. DeLaSerna left the meeting at 12.56 PM, total voting members 11, quorum was maintained]*

**New Business/Additional Topics:** none

**Review of incidents:** none

**Inspections/Ongoing oversight:** none

**IBC training for members:** none

**Public comments:** none

**Adjournment:** The IBC Chair moved to adjourn the meeting at 12.59 PM. The next meeting is scheduled for February 19, 2026, at 12.00 PM via MS Teams and in-person (HEB 233).