U-M Institutional Biosafety Committee
Minutes
Approved at the April 17, 2026, IBC Meeting

Meeting Information:

Date: Friday, March 20, 2026
Time: 1:15-2:30 p.m.
Location: Via conference call (Zoom)

Voting Members Present: Pamela Bennett-Baker, Matt Chapman, Wanlu Du, Chris Fenno, Sheya Jones, Joyce Lai, Tom Lanigan, Daniel Lawrence, Patrick Lester, Akira Ono, Jon Oscherwitz, Stephen Rapundalo, Alex Rickard, John Thomas, Fei Wen, Christiane Wobus (Chair)

Voting Members Absent: Huira Kopera, Jackie Shields, Andrew Tai

Alternate Members Present: Ingrid Bergin (alt. for Lester), Jessica Bunn (alt. for Jones), Dalis Collins (alt. for Lester), Crystal O'Donnell (alt. for Jones), Janet Follo (alt. for Jones), Krishna Rao (alt. for Tai)

IBC Staff Members Present: Jen Harley, Michael Santiago-Castro

Guests Present: Carolyn Kuenz, Eric Robertson, Nicoleen Boyle, Kathy Ignatoski, Jonah Lee, Pat Ward, Sarah Lawson

The meeting was called to order at: 1:15 p.m.
The meeting was adjourned at: 1:30 p.m.

Agenda Items:

1. Updates from the Chair – Christiane Wobus

Dr. Wobus stated there were no updates.

2. Consideration of minutes from the previous meeting

The committee reviewed the minutes from the February 20, 2026, meeting. There were no changes recommended.

> **Motion:** Stephen Rapundalo moved to approve the minutes.
> **Second:** Sheya Jones seconded the motion.
> **Vote:** All in favor.

3. Biosafety Officer Report – Janet Follo

Sheya Jones informed committee members of an exposure incident that did not involve recombinant DNA.

4. Conflict of interest disclosure opportunity

Dr. Wobus asked committee members whether they or their labs were involved with, or were in conflict with, financially or otherwise, any items on today's agenda.

1. Alex Rickard indicated a conflict with application IBCA00001391_AR08 for Dr. Tenuta.

2. Chris Fenno indicated a conflict with application IBCA00001391_AR08 for Dr. Tenuta and IBCA00000656_AR05 for Dr. Sasaki.

5. Applications for committee action

BSL2 Applications

The following BSL2 applications were considered and voted upon separately by the committee due to a conflict of interest.

9. IBCA00000656_AR05
Sasaki, Hajime – Renewal
Current approval: BSL1 (plasmid vectors); BSL2 (lentiviral and adenoviral vectors); BSL1 (Streptococcus intermedius, Parvimonas micra); BSL2 (Fusobacterium nucleatum, Treponema denticola, Prevotella intermedia, Mouse hepatitis virus); BSL2 (LPS); BSL2 (human-derived substances); ABSL1 (transgenic mice); ABSL1 (mice administered Treponema denticola); ABSL2 for the duration (mice administered Prevotella intermedia, Streptococcus intermedius, Fusobacterium nucleatum, Parvimonas micra, lentiviral or adenoviral vectors). No work involving animal-derived substances or plants.
Changes: Added work with additional human-derived substances (BSL2) with administration to mice (ABSL2 for the duration), administration of LPS to mice (ABSL1), and updated risk mitigation practices.
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL1 and BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate. The proposed animal housing containment level is considered appropriate.

17. IBCA00001391_AR08
Tenuta, Livia – Amendment
Current approval: BSL2 (RG2 bacteria and fungi); BSL2 (human-derived substances); BSL1 (animal-derived substances from ruminants); ABSL1 (rats administered RG2 bacteria and fungi). No work involving rDNA, biological toxins, or plants.
Changes: Added work with additional human-derived substances (BSL2).
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate.

> **Motion:** Tom Lanigan moved to approve the (2) applications listed above, at the containment levels agreed upon, contingent on satisfactory completion of a laboratory inspection in the past year and upon any other contingencies noted above.
> **Second:** Stephen Rapundalo seconded the motion.
> **Vote:** All in favor, with Chris Fenno and Alex Rickard recused.

The following BSL2 applications were considered by the committee and voted upon:

1. IBCA00000044_AR04
Stuckey, Jeanne – Amendment
Current approval: BSL1 (plasmid vectors); BSL2 (baculoviral vectors); BSL2 (human-derived substances). No work involving infectious agents, biological toxins, animal-derived substances, animals or plants.
Changes: Added additional plasmid vectors (BSL1).
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL1 containment. Approval is contingent upon minor edits being made to the application.

2. IBCA00000129_AR09
Fortier, Sean – Amendment
Current approval: BSL1 (plasmid vectors and vectorless systems); BSL2 (adenoviral and lentiviral vectors); BSL2 (Diphtheria toxin and LPS); BSL2 (human-derived substances); ABSL1 (transgenic mice); ABSL1 (mice administered Diphtheria toxin); ABSL2 for 3 days (mice administered adenoviral vectors). No work involving infectious agents, animal-derived substances, or plants.
Changes: Changed PI (previously Peters-Golden).
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL1 and BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate. The proposed animal housing containment level is considered appropriate. Approval is contingent upon minor edits being made to the application.

3. IBCA00000310_AR06
Stockbridge, Randy – Amendment
Current approval: BSL1 (plasmid vectors); BSL2 (plasmid vectors in RG2 host); BSL2 (RG2 bacteria). No work involving biological toxins, human- or animal-derived substances, animals or plants.
Changes: Added additional plasmid vectors (BSL1), work with Streptomyces violaceus (BSL1), and Streptococcus mutans (BSL2).
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL1 and BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate.

4. IBCA00000316_AR05
Freddolino, Lydia – Renewal
Current approval: BSL1 (plasmid vectors and vectorless systems); BSL2 (plasmid vectors in RG2 host); BSL2 (RG2 bacteria). No work involving biological toxins, human- or animal-derived substances, animals or plants.
Changes: Added work with non-K12 E. coli plasmid vectors (BSL1). Removed work with Saccharomyces cerevisiae.
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL1 and BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate. Approval is contingent upon minor edits being made to the application.

5. IBCA00000566_AR08
Kao, John – Renewal
Current approval: BSL1 (plasmid vectors); BSL2 (adenovirus and lentivirus vectors); BSL2 (RG2 bacteria and Toxoplasma gondii); BSL2 (Diphtheria toxin); BSL2 (human-derived substances); ABSL1 (transgenic mice); ABSL1 (mice administered Diphtheria toxin); ABSL2 for the duration (mice administered rDNA modified animal cells, RG2 bacteria, and Toxoplasma gondii).
Changes: No major changes.
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL1 and BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate. The proposed animal housing containment level is considered appropriate. Approval is contingent upon minor edits being made to the application and favorable re-review by one reviewer.

6. IBCA00000590_AR06
Razumilava, Nataliya – Renewal
Current approval: BSL2 (lentiviral vectors); BSL2 (human-derived substances); ABSL1 (transgenic mice); ABSL2 for the duration (mice administered human-derived substances). No work involving infectious agents, biological toxins, animal-derived substances, or plants.

Changes: No major changes.
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate. The proposed animal housing containment level is considered appropriate.

7. IBCA00000613_AR05
Mancuso, Peter – Renewal
Current approval: BSL2 (RG2 bacteria); BSL2 (LPS and Lipotaechoic Acid); BSL2 (human-derived substances); ABSL1 (transgenic mice); ABSL1 (mice administered LPS); ABSL2 for the duration (mice administered RG2 bacteria). No work involving rDNA, animal-derived substances, or plants.
Changes: No major changes.
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate. The proposed animal housing containment level is considered appropriate. Approval is contingent upon minor edits being made to the application.

8. IBCA00000650_AR05
Brenner, Chad – Renewal
Current approval: BSL1 (plasmid vectors and vectorless systems); BSL2 (lentivirus and MoLV vectors); BSL2 (human-derived substances); BSL2 (animal-derived substances: non-human primates); ABSL1 (transgenic mice); ABSL2 for the duration (mice administered rDNA modified human-derived substances). No work involving infectious agents, biological toxins, or plants.
Changes: No major changes.
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL1 and BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate. The proposed animal housing containment level is considered appropriate.

9. *This application was handled separately due to a conflict of interest*.

10. IBCA00000699_AR07
Raghavan, Malini – Renewal
Current approval: BSL1 (baculovirus vectors and vectorless systems); BSL2 (plasmid, lentiviral, MSCV, HSV1, and Epstein Barr viral vectors); BSL2 (Influenza A Puerto Rico virus); BSL2 (LPS); BSL2 (human- and animal-derived substances from non-human primates); ABSL1 (transgenic mice); ABSL1 (mice administered LPS or rDNA-modified animal cells); ABSL2 for the duration (mice administered HSV1 vectors). No work involving plants.
Changes: Added additional plasmid vectors (BSL1), additional AAV vectors (BSL2), and additional lentiviral vectors (BSL2). Removed administration of HSV1 vectors to mice.
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL1 and BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate. The proposed animal housing containment level is considered appropriate. Approval is contingent upon minor edits being made to the application.

11. IBCA00000752_AR05
Biteen, Julie – Renewal
Current approval: BSL1 (plasmid vectors); BSL1 (rDNA modified RG1 bacteria); BSL2 (rDNA modified RG2 bacteria); BSL2 (Pseudomonas aeruginosa and pathogenic E. coli). No work involving biological toxins, human- or animal-derived substances, animals or plants.

Changes: No major changes.
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL1 and BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate.

12. IBCA00000807_AR13
Dickson, Robert – Renewal
Current approval: BSL1 (RG1 infectious bacteria); BSL2 (RG2 bacteria); BSL2 (LPS); BSL2 (human-derived substances); BSL1 (animal-derived substances: swine); ABSL1 (transgenic mice); ABSL1 (mice administered RG1 bacteria or LPS); ABSL2 for the duration (mice administered RG2 bacteria). No work involving rDNA or plants.
Changes: Added work with additional human-derived substances (BSL2).
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL1 and BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate. The proposed animal housing containment level is considered appropriate. Approval is contingent upon minor edits being made to the application and favorable re-review by one reviewer.

13. IBCA00000825_AR07
Lee, Jun Hee – Amendment
Current approval: BSL1 (plasmid and AAV vectors); BSL2 (plasmid, adenovirus, lentivirus and AAV vectors); BSL2 (human-derived substances); ABSL1 (transgenic mice and fruit flies); ABSL1 (mice administered AAV vectors, plasmid vectors, or rDNA-modified animal cells); ABSL2 for 3 days (mice administered AAV vectors or adenovirus vectors); ABSL2 for the duration (mice administered human-derived substances). No work involving infectious agents, biological toxins, animal-derived substances, or plants.
Changes: Added administration of rDNA-modified human cells to mice (ABSL2 for the duration).
Consensus: The committee agreed with the reviewers that the proposed animal housing containment level is considered appropriate.

14. IBCA00000847_AR05
Coulombe, Pierre – Renewal
Current approval: BSL1 (plasmid vectors); BSL2 (adenovirus vectors); BSL2 (Diphtheria toxin); BSL2 (human-derived substances); ABSL1 (transgenic mice); ABSL1 (mice administered Diphtheria toxin). No work involving infectious agents, animal-derived substances, or plants.
Changes: Added new gene elements in plasmid vectors (BSL1). Updated work with Diphtheria toxin (BSL2).
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL1 and BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate. The proposed animal housing containment level is considered appropriate. Approval is contingent upon minor edits being made to the application.

15. IBCA00000850_AR08
Prasov, Lev – Amendment
Current approval: BSL1 (vectorless systems, AAV, cosmid, and plasmid vectors); BSL2 (lentiviral vectors); BSL2 (human-derived substances); BSL1 (animal-derived substances from ruminants and swine); ABSL1 (transgenic mice). No work involving infectious agents, biological toxins, or plants.
Changes: Added new gene elements in AAV vectors (BSL1), and administration of AAV and lentiviral vectors to mice (ABSL1).
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL1 containment. The proposed animal housing containment level is considered appropriate.

16. IBCA00000926_AR06
Carruthers, Vernon – Amendment
Current approval: BSL1 (plasmid, cosmid, baculovirus, and AAV vectors); BSL2 (lentivirus and MSCV vectors; plasmid vectors in RG2 host); BSL1 (RG1 parasites); BSL2 (Toxoplasma gondii); BSL2 (human-derived substances); ABSL2 for the duration (mice administered Toxoplasma gondii or rDNA modified RG2 cells). No work involving biological toxins, animal-derived substances, or plants.
Changes: Updated risk mitigation practices (BSL2).
Consensus: The committee agreed with the reviewers that the described BSL2 risk mitigation practices are appropriate.

17. *This application was handled separately due to a conflict of interest*.

18. *This application was tabled.*

19. IBCA00001587_AR05
Heitzeg, Mary – Renewal
Current approval: BSL1 and BSL2 (human-derived substances). No work involving rDNA, infectious agents, biological toxins, animal-derived substances, animals or plants.
Changes: No major changes.
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL1 and BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate.

20. IBCA00002329_AR02
Lukaszewicz, Agnieszka – Renewal
Current approval: BSL1 and BSL2 (plasmid vectors); BSL2 (human-derived substances); ABSL1 (transgenic mice). No work involving infectious agents, biological toxins, animal-derived substances, or plants.
Changes: No major changes.
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL1 and BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate. The proposed animal housing containment level is considered appropriate.

21. IBCA00002351_AR03
Hoang, Thanh - Renewal.
Current approval: BSL1 (plasmid and AAV vectors); BSL2 (lentivirus vectors and AAV vectors with growth control genes); BSL2 (human-derived substances); ABSL1 (transgenic mice); ABSL1 (mice administered AAV vectors). No work involving infectious agents, biological toxins, animal-derived substances, or plants.
Changes: No major changes.
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL1 and BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate. The proposed animal housing containment level is considered appropriate.

22. IBCA00002397_AR08
Li, Jiahe – Amendment
Current approval: BSL1 (plasmid vectors); BSL2 (lentivirus vectors and plasmid vectors in RG2 host); BSL1 (Bacillus subtilis, Veillonella atypica, and E. coli K12 (genetically crippled strains), E. coli EcAZ, E. coli Nissle); BSL2 (E. coli (pathogenic strains), Klebsiella pneumoniae, and Salmonella enterica (Typhimurium)); BSL2 (LPS); BSL2 (human-derived substances); ABSL1 (transgenic mice); ABSL1 (mice administered LPS, rDNA modified animal cells, plasmid vectors, RG1 bacteria, or rDNA modified

RG1 bacteria); ABSL2 for the duration (mice administered human-derived substances, rDNA modified human-derived substances, rDNA modified human-derived substances, rDNA modified RG2 bacteria, or E. coli (pathogenic strains)). No work involving animal-derived substances or plants.
Changes: Added additional plasmid vector in RG2 host (BSL2), work with Fusobacterium nucleatum (BSL2), and administration of Fusobacterium nucleatum and Salmonella enterica to mice (ABSL2 for the duration).
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate. The proposed animal housing containment level is considered appropriate.

23. IBCA00002500_AR07
Kozik, Ariangela – Amendment
Current approval: BSL1 (plasmid vectors and vectorless systems); BSL1 (RG1 bacteria); BSL2 (RG2 bacteria); BSL2 (LPS); BSL2 (human-derived substances). No work involving animal-derived substances, animals or plants.
Changes: Added work with additional RG2 bacteria (BSL2).
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate.

24. IBCA00002655_AR01
Badgley, Catherine – Amendment
Current approval: BSL1 (animal-derived substances: blood samples from wild vertebrate animals); BSL2 (animal-derived substances: stool samples from wild vertebrate animals). No work involving rDNA, infectious agents, biological toxins, human-derived substances, animals or plants.
Changes: Added work with hair samples from wild vertebrate animals (BSL1).
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL1 containment.

25. IBCA00002862_AR01
Schuler, Chase – Amendment
Current approval: BSL1 (plasmid vectors); BSL2 (human-derived substances); ABSL1 (transgenic mice). No work involving infectious agents, biological toxins, animal-derived substances, or plants.
Changes: Added work with lentiviral vectors (BSL2).
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate.

26. IBCA00003031_AR01
Skiba, Meredith – Amendment
Current approval: BSL1 (plasmid, baculoviral vectors, and vectorless systems); BSL2 (Pertussis toxin); BSL2 (human-derived substances). No work involving infectious agents, animal-derived substances, animals or plants.
Changes: Added additional baculovirus vectors (BSL1).
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL1 containment.

27. IBCA00003041_AR01
Barnett, Katherine – Amendment
Current approval: BSL1 (plasmid vectors and vectorless systems); BSL2 (lentivirus vectors); BSL2 (Influenza A, Puerto Rico Virus and SARS-CoV-2); BSL2 (Lipotaechoic Acid and LPS); BSL2 (human-

derived substances); BSL2 (animal-derived substances: non-human primates); ABSL1 (transgenic mice); ABSL2 for the duration (mice administered RG2 viruses). No work involving plants.
Changes: Added work with human coronavirus (BSL2).
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate.

28. IBCA00003140
Innes, Keri - Clinical Research Specimen Processing - Initial Application
Proposed: BSL2 (human-derived substances). No work involving rDNA, infectious agents, biological toxins, animal-derived substances, animals or plants.
Consensus: The committee agreed with the reviewers that the described work is appropriate for BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate. Approval is contingent upon favorable re-review by one reviewer.

> **Motion:** Tom Lanigan motioned to approve the (25) IBC applications listed above at the containment levels agreed upon, contingent on satisfactory completion of a laboratory inspection in the past year and upon any other contingencies noted above.
> **Second:** Patrick Lester seconded the motion.
> **Vote:** All in favor.

Tabled Applications

The following applications were tabled.

18. IBCA00001399_AR06
Beard, Daniel – Amendment
Current approval: BSL1 (plasmid vectors); BSL2 (human-derived substances); BSL1 (animal-derived substances: swine); ABSL1 (transgenic rats). No work involving infectious agents, biological toxins, or plants.
Changes: Updated research goals and updated risk mitigation practices.
Consensus: Tabled.

6. Matters Arising

There were no matters arising.