

**U-M Institutional Biosafety Committee**  
**Draft Minutes**  
Approved at the October 17, 2025, IBC Meeting

**Meeting Information:**

**Date:** Friday, September 19, 2025

**Time:** 1:15-2:30 p.m.

**Location:** Via conference call (Zoom)

**Voting Members Present:** Pamela Bennett-Baker, Matt Chapman, Wanlu Du, Chris Fenno, Janet Follo, Huiru Kopera, Patrick Lester, Stephen Rapundalo, Alex Rickard, Jackie Shields, John Thomas, Fei Wen, Christiane Wobus (Chair)

**Voting Members Absent:** Joyce Lai, Tom Lanigan, Daniel Lawrence, Akira Ono, Andrew Tai

**Alternate Members Present:** Ingrid Bergin (alt. for Lester), Dalis Collins (alt. for Lester), Crystal O'Donnell (alt. for Follo)

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

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

**The meeting was called to order at:** 1:16 p.m.

**The meeting was adjourned at:** 1:49 p.m.

**Agenda Items:**

**1. Updates from the Chair – Christiane Wobus**

Dr. Wobus informed the committee about the NIH Modernization of Biosafety Oversight initiative taking place over the next year. The initiative aims to revamp biosafety oversight (including the NIH Guidelines) to address potential risks beyond recombinant or synthetic nucleic acid technologies. NIH will be soliciting feedback from the biosafety community during a series of listening sessions. The new policy is expected to be released in Fall 2026. The first listening session will be held at the end of this month. IBC members are encouraged to participate in one of the sessions.

**2. Consideration of minutes from the previous meeting**

The committee reviewed the minutes from the August 15, 2025, meeting. There were no changes recommended.

**Motion:** Stephen Rapundalo moved to approve the minutes.

**Second:** Janet Follo seconded the motion.

**Vote:** All in favor.

**3. Biosafety Officer Report – Janet Follo**

Ms. Follo said Sheya Jones has been hired by EHS as the new Biosafety Manager and she will start on October 15.

**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. Christiane Wobus indicated a conflict with application IBCA0001782\_AR04 for Dr. Emmer.
2. Alex Rickard indicated a conflict with application IBCA0000128\_AR04 for Dr. Solomon.
3. Huira Kopera indicated a conflict with application IBCA0000294\_AR05 for Dr. Kidd.

## 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. Chris Fenno chaired this portion of the meeting.*

#### **30. IBCA00001782\_AR04**

##### **Emmer, Brian – Amendment**

**Current approval:** BSL1 (plasmid vectors); BSL2 (lentivirus vectors); BSL2 (SARS-CoV-2); BSL2 (human-derived substances); ABSL1 (transgenic mice). No work involving biological toxins, animal-derived substances, or plants.

**Changes:** Added work with AAV vectors (BSL2) with administration to mice (ABSL2 for 3 days).

**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, favorable review from one reviewer, and favorable re-review by one reviewer.

**Motion:** Stephen Rapundalo moved to approve the (1) 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:** Matt Chapman seconded the motion.

**Vote:** All in favor, with Christiane Wobus recused.

*Christiane Wobus resumed chairing the meeting.*

#### **3. IBCA00000128\_AR04**

##### **Solomon, Michael – Renewal**

**Current approval:** BSL1 (RG1 bacteria); BSL2 (RG2 bacteria and fungi); BSL2 (human-derived substances). No work involving rDNA, 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. Approval is contingent upon minor edits being made to the application

#### **9. IBCA00000294\_AR05**

##### **Kidd, Jeffrey – Renewal**

**Current approval:** BSL1 (plasmid and phage vectors); BSL2 (lentivirus vectors); BSL2 (human-derived substances); BSL2 (animal-derived substances: non-human primates). No work involving infectious agents, biological toxins, 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.

**Motion:** Stephen Rapundalo 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:** Matt Chapman seconded the motion.

**Vote:** All in favor, with Alex Rickard and Huira Kopera recused.

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

#### **1. IBCA00000060\_AR10**

##### **Parent, Jack – Renewal**

**Current approval:** BSL1 (plasmid, AAV vectors and vectorless systems); BSL2 (lentiviral and MoLV vectors); BSL2 (TTX); BSL2 (human-derived substances); ABSL1 (transgenic mice and zebrafish); ABSL1 (rodents administered plasmid, lentiviral, or AAV vectors; zebrafish administered plasmid vectors; mice administered vectorless systems); ABSL2 for the duration (rats administered human-derived substances; mice administered rDNA-modified human-derived substances). No work involving infectious agents, animal-derived substances, or plants.

**Changes:** Added new gene elements in plasmid vectors (BSL1). Removed work with tetrodotoxin, zebrafish, and rats.

**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.

#### **2. IBCA00000073\_AR20**

##### **Xu, Zhen – Amendment**

**Current approval:** BSL1 (human-derived substances: decontaminated human skullcap), BSL2 (human-derived substances; animal-derived substances from swine and ruminants); ABSL1 (rodents administered rDNA-modified animal cells; pigs administered animal-derived substances or human-derived substances: decontaminated human skullcap); ABSL2 for the duration (mice administered human-derived substances). No work involving infectious agents, biological toxins, or plants.

**Changes:** Added additional animal-derived substances from swine and ruminants (BSL2) and updated risk mitigation practices.

**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.

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

#### **4. IBCA00000138\_AR06**

##### **Shavit, Jordan - Amendment**

**Current approval:** BSL1 (plasmid vectors and vectorless systems); BSL2 (pathogenic E. coli); BSL2 (LPS); BSL2 (human-derived substances); ABSL1 (transgenic mice and zebrafish); ABSL1 (zebrafish administered LPS); ABSL2 for the duration (zebrafish administered pathogenic E. coli). No work involving animal-derived substances or plants.

**Changes:** Added work with Klebsiella pneumoniae (BSL2) with administration to zebrafish (ABSL2 for the duration). Removed work with pathogenic E. coli.

**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.

#### 5. IBCA00000139\_AR03

##### **Banerjee, Ruma – Renewal**

**Current approval:** BSL1 (plasmid vectors); BSL2 (MoLV and lentivirus vectors); BSL2 (human-derived substances); ABSL1 (transgenic mice). No work involving infectious agents, biological toxins, animal-derived substances, or plants.

**Changes:** Added work with additional plasmid vectors (BSL2) and removed work with MoLV vectors.

**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.

#### 6. IBCA00000153\_AR04

##### **Bitzer, Markus – Renewal**

**Current approval:** BSL1 (plasmid vectors and vectorless systems); BSL2 (human-derived substances); ABSL1 (transgenic mice); ABSL1 (mice administered vectorless systems). No work involving infectious agents, biological toxins, animal-derived substances, or plants.

**Changes:** Added new gene elements in plasmid vectors and vectorless systems (BSL1). No longer administering biological substances to animals.

**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.

#### 7. IBCA00000165\_AR05

##### **Weisman, Lois – Renewal**

**Current approval:** BSL1 (plasmid and AAV vectors); BSL2 (adenoviral and lentiviral vectors); BSL2 (TTX); BSL2 (human-derived substances). No work involving infectious agents, 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 and BSL2 containment and that BSL2 risk mitigation practices are likewise appropriate.

#### 8. IBCA00000197\_AR05

##### **Smrcka, Alan – Renewal**

**Current approval:** BSL1 (plasmid, phage, and baculoviral vectors); BSL2 (adenoviral, lentiviral, and AAV vectors with growth control genes); BSL2 (human-derived substances); ABSL1 (transgenic mice); ABSL2 for 3 days (mice administered AAV vectors). No work involving infectious agents, biological toxins, animal-derived substances, or plants.

**Changes:** Added work with animal-derived substances from non-human primates (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.

**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. IBCA00000324\_AR07****Hatch, Nan – Amendment**

**Current approval:** BSL1 (plasmid vectors); BSL2 (adenovirus, MoLV, and lentivirus vectors); BSL2 (human-derived substances); ABSL1 (transgenic mice); ABSL2 for 3 days (rodents administered lentivirus vectors). No work involving infectious agents, biological toxins, animal-derived substances, or plants.

**Changes:** Added additional transgenic mice (ABSL1).

**Consensus:** The committee agreed with the reviewers that the proposed animal housing containment level is considered appropriate. Approval is contingent upon minor edits being made to the application

**11. IBCA00000337\_AR05****Swanson, Michele – Renewal**

**Current approval:** BSL1 (plasmid vectors and vectorless systems); BSL2 (plasmid vectors in RG2 host); BSL2 (*Legionella pneumophila*). No work involving biological toxins, human- or animal-derived substances, animals or plants.

**Changes:** Removed work with aerosolized *Legionella pneumophila*.

**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

**12. IBCA00000353\_AR06****Lawrence, Daniel – Renewal**

**Current approval:** BSL1 (plasmid and AAV vectors; vectorless systems); BSL2 (lentivirus vectors and AAV vectors with toxic genes); BSL1 (prions); BSL2 (Influenza A, Puerto Rico virus); BSL2 (LPS); BSL2 (human-derived substances); BSL2 (animal-derived substances: swine); ABSL1 (transgenic rodents); ABSL1 (mice administered AAV vectors, LPS, or prions); ABSL2 for the duration (mice administered Influenza A, Puerto Rico virus). No work involving plants.

**Changes:** Added work with an additional plasmid vector (BSL1), new gene elements in vectorless systems (BSL1). Removed work with Influenza A, animal-derived substances, and transgenic rats.

**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.

**13. IBCA00000359\_AR05****Olson, David – Renewal**

**Current approval:** Current approval: BSL1 (plasmid and AAV vectors); BSL2 (adenoviral, rabies, and HSV viral vectors); ABSL1 (transgenic mice); ABSL1 (mice administered adenoviral, AAV or rabies viral vectors); ABSL2 for 3 days (mice administered HSV vectors). No work involving infectious agents, biological toxins, human- or animal-derived substances, or plants.

**Changes:** Added new gene elements in plasmid and AAV vectors (BSL1) and additional transgenic mice (ABSL1).

**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.

**14. IBCA00000374\_AR03****Kleer, Celina – Renewal**

**Current approval:** BSL1 (plasmid vectors); BSL2 (adenovirus and lentivirus vectors); BSL2 (human-derived substances); ABSL1 (transgenic mice); ABSL1 (mice administered rDNA modified animal cells); ABSL2 for 3 days (mice administered lentivirus vectors); ABSL2 for the duration (mice administered

human-derived substances or rDNA modified 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 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.

#### 15. IBCA00000380\_AR04

**Byrd MD MS, J Brian – Renewal**

**Current approval:** BSL1 (plasmid vectors); BSL2 (lentivirus vectors); BSL2 (human-derived substances); BSL2 (animal-derived substances: non-human primates). No work involving infectious agents, biological toxins, 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.

#### 16. IBCA00000381\_AR04

**Nandakumar, Jayakrishnan – Renewal**

**Current approval:** BSL1 (plasmid and baculovirus vectors; vectorless systems); BSL2 (lentivirus and MSCV vectors); BSL2 (human-derived substances). No work involving 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. Approval is contingent upon minor edits being made to the application.

#### 17. IBCA00000476\_AR05

**Padmanabhan, Vasantha – Renewal**

**Current approval:** BSL2 (human-derived substances and animal-derived substances from sheep). No work involving infectious agents, biological toxins, animals 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.

#### 18. IBCA00000477\_AR07

**Pearson, Melanie – Renewal**

**Current approval:** BSL1 (plasmid vectors); BSL2 (plasmid vectors in RG2 host); BSL1 (RG1 E. coli); BSL2 (RG2 bacteria); BSL2 (Cholera toxin); BSL2 (human-derived substances); ABSL1 (mice administered Cholera toxin); ABSL2 for the duration (mice administered RG2 bacteria or rDNA-modified RG2 bacteria). No work involving animal-derived substances or plants.

**Changes:** Added additional plasmid vectors (BSL1), additional human-derived substances (BSL2) and work with transgenic mice (ABSL1).

**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.

#### 19. IBCA00000502\_AR08

**Besirli, Cagri – Renewal**

**Current approval:** Current approval: BSL1 (plasmid vectors); BSL2 (AAV vectors with growth control

genes); BSL2 (RG2 bacteria); BSL2 (human-derived substances); ABSL1 (transgenic mice and rabbits); ABSL1 (rodents and rabbits administered AAV vectors; rabbits administered human-derived substances or rDNA modified human-derived substances via intraocular route of administration). No work involving biological toxins, animal-derived substances, or plants.

**Changes:** Added work with an additional plasmid vector (BSL1) and updated risk mitigation practices (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 favorable re-review by one reviewer.

## 20. IBCA00000512\_AR10

### Jones, Kevin – Renewal

**Current approval:** BSL1 (plasmid and AAV vectors; vectorless systems); BSL2 (lentivirus vectors); BSL2 (human-derived substances); ABSL1 (transgenic zebrafish and mice); ABSL1 (zebrafish administered vectorless systems or plasmid vectors; mice administered AAV vectors). No work involving infectious agents, biological toxins, animal-derived substances, or plants.

**Changes:** Added work with additional human-derived substances (BSL2) and an additional category of routes of administration for administration of AAV vectors to mice (ABSL1).

**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. IBCA00000555\_AR18

### Moore, Bethany – Amendment

**Current approval:** BSL1 (plasmid vectors); BSL2 (MoLV vectors and recombinant murine gammaherpes virus); BSL1 (RG1 viruses and bacteria); BSL2 (RG2 bacteria, fungi, and viruses; wild type Murine Roseolovirus); BSL2 (LPS and Diphtheria toxin); BSL2 (human-derived substances); ABSL1 (transgenic mice); ABSL1 (mice administered RG1 bacteria, heat-killed MRSA, LPS or Diphtheria toxin); ABSL2 for 3 days (mice administered rDNA-modified animal cells); ABSL2 for the duration (mice administered RG1 and RG2 viruses, bacteria, or fungi). No work involving animal-derived substances or plants.

**Changes:** Added work with *Klebsiella pneumoniae* (BSL2) with administration 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. Approval is contingent upon minor edits being made to the application.

## 22. IBCA00000792\_AR06

### Pennathur, Subramaniam – Amendment

**Current approval:** BSL1 (plasmid vectors and vectorless systems); BSL2 (lentiviral vectors); BSL2 (human-derived substances); ABSL1 (transgenic mice); ABSL1 (mice administered vectorless systems). No work involving infectious agents, biological toxins, animal-derived substances, or plants.

**Changes:** Added new gene elements in plasmid vectors (BSL1) and in lentiviral vectors (BSL2), and work with AAV vectors (BSL1) with administration to mice (ABSL1).

**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.

**23. IBCA00000836\_AR04****Cianfrocco, Michael – Amendment**

**Current approval:** BSL1 (plasmid and baculovirus vectors); BSL2 (baculovirus vectors); BSL2 (human-derived substances). No work involving infectious agents, biological toxins, animal-derived substances, animals or plants.

**Changes:** Added work with an additional plasmid vector (BSL1) and work with animal-derived substances from non-human primates (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.

**24. IBCA00000850\_AR07****Prasov, Lev – Amendment**

**Current approval:** BSL1 (vectorless systems, AAV, cosmid, and plasmid vectors); BSL2 (lentiviral vectors); BSL2 (human-derived substances); BSL1 (animal-derived substances); ABSL1 (transgenic mice). No work involving infectious agents, biological toxins, or plants.

**Changes:** Added additional plasmid vectors (BSL1) and updated risk mitigation practices.

**Consensus:** The committee agreed with the reviewers that the described work is appropriate for BSL1 and that BSL2 risk mitigation practices are likewise appropriate.

**25. IBCA00001056\_AR05****Snitkin, Evan – Amendment**

**Current approval:** BSL1 (plasmid vectors); BSL2 (plasmid vectors in RG2 host); BSL2 (RG2 bacteria); BSL2 (human-derived substances). No work involving biological toxins, animal-derived substances, animals or plants.

**Changes:** Added additional work with 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.

**26. IBCA00001070\_AR13****Truttmann, Matthias – Amendment**

**Current approval:** BSL1 (vectorless systems, plasmid and phage vectors); BSL2 (lentiviral and AAV vectors); BSL2 (RG1 and RG2 bacteria); BSL1 (animal-derived substances from llamas and alpacas); BSL2 (human-derived substances); ABSL1 (transgenic mice and *C. elegans*); ABSL1 (*C. elegans* administered *Enterococcus faecalis*; llamas and alpacas administered vectorless systems; mice administered vectorless systems); ABSL2 for 3 days (mice administered AAV vectors); ABSL2 for the duration (*C. elegans* or mice administered RG2 bacteria; mice administered human-derived substances). No work involving biological toxins 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.

**27. IBCA00001499\_AR11****Spencer-Segal, Joanna – Renewal**

**Current approval:** BSL1 (plasmid and AAV vectors); BSL2 (LPS); ABSL1 (transgenic mice); ABSL1 (mice administered LPS or AAV vectors). No work involving infectious agents, human- or 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. Approval is contingent upon minor edits being made to the application

**28. IBCA00001507\_AR03****Mathew, Anna – Renewal**

**Current approval:** BSL2 (human-derived substances); ABSL1 (transgenic mice). No work involving rDNA, 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. Approval is contingent upon minor edits being made to the application.

**29. IBCA00001563\_AR05****Wubben, Thomas – Renewal**

**Current approval:** BSL1 (plasmid vectors); BSL2 (lentiviral and AAV vectors with growth control genes); BSL2 (human-derived substances); ABSL1 (transgenic mice); ABSL1 (rodents administered AAV vectors); ABSL2 for the duration (mice administered human-derived substances). No work involving infectious agents, biological toxins, animal-derived substances, or plants.

**Changes:** Added additional plasmid vectors (BSL1) 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.

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

**31. IBCA00002225\_AR01****Oldham, Justin – Renewal**

**Current approval:** BSL2 (human-derived substances). No work involving rDNA, infectious agents, biological toxins, animal-derived substances, animals or plants.

**Changes:** Updated risk mitigation practices.

**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.

**32. IBCA00002255\_AR02****Werneburg, Sebastian – Renewal**

**Current approval:** BSL1 (vectorless systems, plasmid and AAV vectors); BSL2 (lentiviral vectors); BSL1 (Cholera toxin subunit B); BSL2 (LPS, Pertussis toxin, Diphtheria toxin, Tetrodotoxin); BSL2 (human-and animal-derived substances from non-human primates); ABSL1 (transgenic rodents); ABSL1 (rodents administered vectorless systems, Tetrodotoxin, AAV vectors, Cholera toxin subunit B, plasmid vectors, Pertussis toxin, Diphtheria toxin, LPS or rDNA-modified animal cells); ABSL2 for 3 days (rodents administered lentiviral vectors); ABSL2 for the duration (mice administered human-derived substances). No work involving infectious agents or plants.

**Changes:** Added new gene elements in plasmid and AAV vectors (BSL1) and in lentiviral vectors (BSL2) and additional plasmid vectors (BSL1).

**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.

**33. IBCA00002397\_AR05****Li, Jiahe – Amendment**

**Current approval:** BSL1 (plasmid vectors); BSL2 (lentivirus vectors, plasmid vectors in an RG2 host); BSL1 (Bacillus subtilis and E. coli K12 (genetically crippled strains)); BSL2 (E. coli (pathogenic strains 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 work with Veillonella atypica (BSL1) with administration to mice (ABSL1).

**Discussion:** There were questions from the committee regarding the safety level of Veillonella atypica. In the past. After a discussion of the proposed work it was agreed that the BSL1 and ABSL1 levels were appropriate.

**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.

**34. IBCA00002592\_AR01****Liang, Tian – Amendment**

**Current approval:** BSL1 (plasmid vectors and vectorless systems); BSL2 (human-derived substances); ABSL1 (transgenic mice). No work involving infectious agents, biological toxins, animal-derived substances, or plants.

**Changes:** Added new gene elements in plasmid vectors and vectorless systems (BSL1), work with AAV vectors (BSL1) with administration to mice.

**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. Approval is contingent upon minor edits being made to the application

**35. IBCA00002723\_AR03****Wong, Pamela – Amendment**

**Current approval:** BSL1 (vectorless systems); BSL2 (lentiviral vectors); BSL1 (inactivated SARS-CoV-2 virus); BSL2 (RG2 viruses); BSL1 (Monophosphoryl Lipid A); BSL2 (Staphylococcal enterotoxins); BSL2 (human-derived substances); ABSL1 (transgenic mice); ABSL1 (mice administered vectorless systems, Monophosphoryl Lipid A, or inactivated SARS-CoV-2 virus); ABSL2 for 21 days (mice administered Influenza A/New Caledonia/20/99); ABSL2 for the duration (mice administered Influenza virus, Influenza H1N1 virus, Influenza A Puerto Rico virus, Vesicular stomatitis virus, or RSV). No work involving animal-derived substances or plants.

**Changes:** Added work with SARS-CoV-2 (BSL2) with administration 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.

**36. IBCA00003045****Ledvina, Hannah - Initial Application**

**Proposed:** BSL1 (plasmid vectors); BSL2 (plasmid vectors in RG2 host); BSL1 (RG1 bacteria); BSL2 (RG2 bacteria). No work involving biological toxins, human- or animal-derived substances, animals or plants.

**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.

**Motion:** Janet Follo motioned to approve the (33) 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:** Stephen Rapundalo seconded the motion.

**Vote:** All in favor.

### BSL1 Applications

*The following BSL1 applications were considered by the committee and voted upon.*

#### **37. IBCA00000241\_AR05**

##### **Flagel, Shelly – Renewal**

**Current approval:** BSL1 (plasmid and AAV vectors); ABSL1 (transgenic rats); ABSL1 (rats administered AAV vectors). No work involving infectious agents, biological toxins, human- or animal-derived substances, or plants.

**Changes:** Added new gene elements in plasmid vectors (BSL1).

**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.

#### **38. IBCA00000404\_AR03**

##### **Triebel, Raymond – Renewal**

**Current approval:** BSL1 (plasmid vectors). No work infectious agents, biological toxins, human- or animal-derived substances, animals or plants.

**Changes:** Added new gene elements in plasmid vectors (BSL1).

**Consensus:** The committee agreed with the reviewers that the described work is appropriate for BSL1 containment.

#### **39. IBCA00000425\_AR03**

##### **Lee, Cheng-yu – Renewal**

**Current approval:** BSL1 (plasmid vectors and vectorless systems); ABSL1 (transgenic fruit flies). No work involving infectious agents, biological toxins, human- or animal-derived substances, or plants.

**Changes:** No major changes.

**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.

#### **40. IBCA00002219\_AR02**

##### **Levitt, Erica – Renewal**

**Current approval:** BSL1 (AAV vectors); ABSL1 (transgenic mice); ABSL1 (rodents administered AAV vectors). No work involving infectious agents, biological toxins, human- or animal-derived substances, or plants.

**Changes:** No major changes.

**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.

#### **41. IBCA00003003**

##### **Estrada, Jon - Initial Application**

**Proposed:** BSL1 (animal-derived substances: swine and fowl). No work involving rDNA, infectious agents, biological toxins, human-derived substances, animals or plants.

**Consensus:** The committee agreed with the reviewers that the described work is appropriate for BSL1 containment.

**Motion:** Janet Follo motioned to approve the (5) IBC applications listed above at the containment levels agreed upon.

**Second:** John Thomas seconded the motion.

**Vote:** All in favor

## 6. Matters Arising

There were no matters arising.