CHAPMAN UNIVERSITY | Environmental Health and Safety

Institutional Biosafety Committee
Meeting Minutes
Tuesday, September 8, 2026
Zoom online and Keck 149

Quorum = 6

PRESENT	Department/IBC Affiliation
Rosalee Hellberg, Ph.D., **Chair**	Program Director, Food Science Professor, Food Science, Schmid College of Science and Technology
Chuck Sohaskey, Ph.D.	EHS / Biosafety Officer
Zain Tariq	Chemical Inventory Technician
Karen Swift, B.S.	Manager, EHS, Chemical Hygiene Officer
Trinka Adamson	IACUC Veterinarian
Bill Peacher	Community 2
Ashley Whelpley	Assistant Director of Lab Operations, Schmid College of Science and Technology
Hagop Atamian, Ph.D.	Associate Professor of Biology, Schmid College of Science and Technology
EXCUSED	
Cecilia Lopez	Assistant Professor, Schmid College of Science and Technology
Marco Bisoffi, Ph.D. **Alt**	Associate Professor of Biochemistry and Molecular Biology, College of Science and Technology
Bruce Webster, Ph.D.	Community 1
Kimberly Muth	Assistant Director of Operations, Office of Research
Jason Yamaki, Pharm.D., Ph.D.	Associate Professor, School of Pharmacy
Bill Peacher	Community 2

I. MEMBERSHIP ISSUES

New appointment letters will be submitted for Marco Bisoffi, Bruce Webster and Ashley Whelpley.

II. REVIEW OF MINUTES of June 9, 2026

These were approved with the correction of the date of today's meeting.

III. IBC CHAIRPERSON REPORT

No report

IV. BIOSAFETY OFFICER REPORT

2024-6-2 Owens, Cedric. Improving Sunflower Protein Functionality and Quality By Modulating Polyphenol-Protein And Thiol-Protein Conjugation. **Extension**

NIH will not accept new proposals for research falling under the Executive Order's definition of dangerous gain-of-function research. The purpose of this order is to bar scientists from conducting experiments that would make biological agents more dangerous. There is currently no such work at Chapman.

No biosafety incidents reported since last meeting

V. OTHER BUSINESS

Review of updated Biosafety Manual. The revised Biosafety Manual was distributed to committee members in advance to allow time for review and the submission of comments and recommendations. During the meeting, all proposed additions, revisions, and deletions were discussed. Following discussion, the committee unanimously approved all proposed changes and adopted the updated manual.

VI. INITIAL PROJECT REVIEWS

2026-9-1 Lopez, Cecilia. Characterization of Yogurt Enzymes that produce Urolithin A from Ellagic Acid

- *Lopez (BUA) - Characterization of Yogurt Enzymes that produce Urolithin A from Ellagic Acid*

This project aims to identify the genes and enzymes responsible for the conversion of ellagic acid to urolithin A. Generally, this reaction is done by anaerobes but *Streptococcus thermophilus* does the conversion under aerobic conditions, suggesting the presence of a novel enzymatic pathway. Genome analysis of *S. thermophilus* has identified 11 candidate genes for this reaction. This project proposes to clone, express, and characterize these genes to determine their role in the conversion process. The genes will be cloned into expression vectors and tagged recombinant proteins will be produced in *E. coli*. The purified proteins will then be enzymatically characterized to assess their ability to catalyze the conversion of ellagic acid to urolithin A.
S. thermophilus is Risk Group 1 bacterium. and the project is BSL-1 The rDNA work is Class III-F exempt. There are no biosecurity concerns.
The committee voted to unanimously approve the project with the following stipulations:

1. Question 14g should be no, as no rDNA work is proposed with cell cultures.
2. Question 39 should be yes and ‘outside company’ checked.
3. Question 40 should be no.
4. Question 52 – probably should be no since no particularly hazardous substance will be used.

VII. CONTINUING PROJECT REVIEWS

2024-9-3 Yamaki, Jason and Elshahawi, Sherif. Developing Drug-Leads to Inhibit *Clostridioides difficile* Bacterial Infection

- *Yamaki (BUA) - Developing Drug-Leads to Inhibit Clostridioides difficile Bacterial Infection*
- *Yamaki C.diff Exposure Plan 2026*

Two derivatives of daptomycin have been developed and will be tested for their activity against *C. difficile* in mice. Mice will first be exposed to a cocktail of 5 antibiotics: kanamycin, gentamicin, colistin, metronidazole, and vancomycin in their drinking water followed 4 days later with an intraperitoneal injection of clindamycin. *C. difficile* will be grown in the lab and transferred to the vivarium and the mice will be infected orally with *C. difficile* spores. Mice will be treated with vancomycin or the two test daptomycin analogs. Stool samples will be collected and transported back to the lab to be plated for growth of *C. difficile* over the course of the experiment. One strain that will be used will be metronidazole resistant but no antibiotic strains will be created.

C. difficile is Risk Group 2, and no rDNA work is proposed. This is classified as BSL-2. So The main biosecurity focus is on protecting lab workers.

After discussion the committee voted to unanimously approve it.

2024-9-1 Kaur, Kamaljit. Uptake and toxicity studies of synthetic drug (doxorubicin) conjugates using breast cancer cells and normal (non-cancerous) cells

- *Kaur (BUA) - Uptake and toxicity studies of synthetic drug (doxorubicin) conjugates using breast cancer cells and normal (non-cancerous) cells*

The purpose is to evaluate the uptake and toxicity of doxorubicin conjugates with normal and cancerous human cells. Normal, human cells, several breast cancer cells lines and one umbilical cell line will be grown and treated with standard or conjugated doxycycline. FACS will be used to determine how much drug entered the cells and an MTT assay to determine viability.

The biggest risk is from accidental exposure to the drug or the cell lines. Because there are human cells it is a BSL-2 project. There is no rDNA work proposed, and no biosecurity risks. But they should be offered the hepatitis vaccine.

The committee voted to unanimously approve the project with the stipulation that question 6 about animal work be corrected.

2023-9-2 Sun, Yang. Screening APE/Ref-1 and nNOS inhibitors for the treatment of human melanoma

- *Yang (BUA) - Screening APE/Ref-1 and nNOS inhibitors for the treatment of human melanoma*

This project evaluates newly developed nNOS and APE/Ref-1 inhibitors as potential anti-melanoma therapies using both laboratory cell studies and mouse tumor models. The compounds will be tested in melanoma and other cancer cell lines using molecular and cellular analysis techniques, then anti-tumor effectiveness and mechanisms of action will be assessed in human melanoma xenograft and immunocompetent mouse melanoma models. A new model is the chick chorioallantoic membrane (CAM) model in which human melanoma cells are implanted into fertilized chicken eggs to generate tumors for angionesis and tumor growth analysis. siRNA or CRISPR-Cas9 will be used to knock out APE/Ref-1 or nNOS in cell culture.

The NIH classification III-E because changes are made to genomic DNA in cells. The human cells are RG1 but handled under BSL-2 conditions. There are no major biosecurity risks. The hepatitis vaccine has already been offered.
The committee voted to unanimously approve the project with the following stipulations:

1. Question 20 - The NIH classification of the CRISPR-Cas9 work be changed to III-E.
2. Egg disposal be detailed.
3. Table 11 column e – *E. coli* is fecal also.
4. Question 2 says that all experiments will be conducted in 9501 but animal work must be done in the vivarium in 9401.

VIII. NEXT MEETING

Next meeting is scheduled for December 7, 2026, at the Rinker campus.