CHAPMAN UNIVERSITY | Environmental Health and Safety

**Institutional Biosafety Committee**
**Meeting Agenda**
**Monday, March 9, 2026**
**Time: 12:00 pm**
**Zoom online and Keck-149**

Quorum = 6

| **PRESENT** | **Department/IBC Affiliation** |
|---|---|
| Rosalee Hellberg, Ph.D., **Chair** | Program Director, Food Science<br>Associate Professor, Food Science, Schmid College of Science and Technology |
| Chuck Sohaskey, Ph.D. | EHS / Biosafety Officer |
| Marco Bisoffi, Ph.D. **Alt** | Associate Professor of Biochemistry and Molecular Biology, College of Science and Technology |
| Karen Swift, B.S. | Manager, EHS, Chemical Hygiene Officer |
| Bruce Webster, Ph.D. | Community 1 |
| Trinka Adamson | IACUC Veterinarian |
| Kimberly Muth | Assistant Director of Operations, Office of Research |
| Gio Bravo | Vivarium Supervisor |
| Cecilia Lopez | Assistant Professor, Schmid College of Science and Technology |
| **EXCUSED** | |
| Jason Yamaki, Pharm.D., Ph.D. | Associate Professor, School of Pharmacy |
| 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 |

I. **MEMBERSHIP ISSUES**
New member – Cecilia Lopez as an IBC alternate member.
New appointment letters for Chuck, Karen, Rosalee and Jason will be submitted after everyone agreed to continue on the committee.
New Standards Agreement forms are required from everyone.

II. **REVIEW OF MINUTES** of December 8, 2025
Approved unanimously.

**III. IBC CHAIRPERSON REPORT**
No report

## IV. BIOSAFETY OFFICER REPORT

**2023-12-1. Bisoffi, Marco.** Molecular Studies in Cancer Cells and Tissues CLOSED

**2025-3-2. Hellberg, Rosalee**. Disinfection of enterotoxigenic *Escherichia coli* (ETEC) on food contact surfaces using the Contamination Sanitization Inspection and Disinfection (CSI-D) system. Review postponed until next meeting because of request for new documents.

**NIH Policy on Enhancing Security Measures for Human Biospecimens**, also called the *NIH Biospecimens Security Policy*.
Aimed at preventing misuse of U.S. genetic and health related data by foreign adversaries. Applies to all NIH supported human biospecimens that are collected, obtained, stored, used or distributed. May not directly or indirectly share them with China, Russia, Iran, North Korea, Cuba or Venezuela. Chapman will strengthen biospecimen storage and access controls and track all NIH-funded biospecimens and maintain distribution logs with these countries. Currently there is no lab at Chapman that collaborates with researchers from there. If this changes it will be reported to the IBC.

There was an update on the new hepatitis policy. A LearnUpon course was developed to document compliance. One lab was signed up to test the process and so far is working well.

There were no biosafety incidents reported since the last meeting

## V. INITIAL PROJECT REVIEWS

**2026-3-1 Mehvar, Reza.** Regulation of SK channels, polycystin channels, taste receptors, and $Ca^{2+}$ pump

- Mehvar (BUA) - Regulation of SK channels, polycystin channels, taste receptors, and Ca2+ pump

The genes for human SK, polycystic-2 channels and Sarcoendoplasmic Reticulum Calcium ATPase (SERCA) pump will be cloned into *E. coli*. These Bacmids will be transfected into Sf9 insect cells to produce baculovirus. These viruses will be used to transduce human HEK293 cells to produce the different channel proteins. The cells will then be harvested and the protein extracted and purified. This work involves rDNA work and is classified as III-D. Because of the human cells and baculovirus this is a BSL-2 project. There are no biosecurity issues. But with RG2 human cells they will be offered the hepatitis vaccine. This project was originally under Miao Zhang but will now be taken over by Reza Mehvar. There were no other changes since the last review in September of 2025. After discussion the project was approved unanimously.

**2026-3-2 Sharma, Ajay** To evaluate the ocular safety and trans corneal penetration of the test compound Tarsus NCE1 and to study the biology of human corneal and conjunctival epithelial cells.

- *Sharma (BUA) - To evaluate the ocular safety and trans corneal penetration of the test compound Tarsus NCE1*

This project is designed to test how safe a compound, Tarsus NCE-1 is to eye tissue, and whether it can pass through the outer layer of the cornea. Two different human eye cells, cornea and conjunctival epithelial cells will be grown and then exposed to the Tarsus NCE-1 and necrosis/apoptosis will be measured. Then corneal permeation will be measured with donor human corneas. Two rabbit cell lines might also be tested. Because the human cells are all RG2 it is a BSL-2 project. There is no rDNA work and no biosecurity risks. But they will be offered the hepatitis vaccine. After discussion the project was approved unanimously with the minor stipulation that the PPP typo in question 2 be corrected.

## VI. CONTINUING PROJECT REVIEWS

**2025-3-1 Elshahawi, Sherif.** Developing drugs using chemoenzymatic methods

- *Elshahawi (BUA) - Developing drugs using chemoenzymatic methods*
- *Elshahawi Exposure control plan.2025*

This project involves cloning modifying enzymes from assorted microbes into *E. coli* and/or *Streptomyces* spp and using these enzymes to modify compounds that have antimicrobial properties. Then testing these new compounds on a variety of microbes, and some human cancer cell lines. Promising compounds will be tested in mice (healthy and neutropenic) to first determine pharmacokinetics and lethality. Then pilot studies to determine the optimal infection protocol using *Enterococcus. faecalis*, *Staphylococcus aureus* and possibly *Enterococcus faecium*. Finally infected mice will be tested with the new compounds to see if they improve survival. The rDNA involves exempt and non-pathogenic microbes and is classified as III-F. Because of the RG2 human cells they will be offered the hepatitis vaccine. Additional training for the vivarium staff was provided, which included the safe handling of cyclophosphamide. Biosafety issues were adequately covered in the exposure control plan. After discussion the project was approved unanimously with the following stipulations:

1. Page 1 and question 1 – the IACUC protocol number is outdated.
2. Table 23 – typo. It should be aBSL-2.

**2024-3-1 Ibba, Michael.** The role of quality control in microbial translation

- *Ibba (BUA)* - The role of quality control in microbial translation

This project studies translation in *E. coli*, *B. subtilis* and *S cerevisiae*. All strains are Risk Group 1 and present a low risk. There is rDNA work, but the NIH classification is III-F exempt. This is categorized as an RG-1 project. No hepatitis vaccine is required and there are no biosecurity concerns. After discussion the project was approved unanimously.

**2023-3-3 Montazeri, Hamid.** Nucleic Acid Delivery to Human Cancer Cell lines

- *Montazeri (BUA) - Nucleic Acid Delivery to Human Cancer Cell lines*

The focus is on the development of novel nanocarriers of nucleic acid to treat human cancer. A mouse model with a xenograft of human cancer cells (MDA-MG-2321) is being used, with plans to incorporate LNCaP cells in the future. These mice are injected with nanoparticles carrying nucleic acids, specifically siRNA at present and CRISPR/Cas9 in future experiments. The ultimate goal is to create a cell-specific nanoparticle that effectively reduces tumor growth. One set of human cells is RG-2 so they will be offered the hepatitis vaccine. The NIH classification is

III-F, so this is a risk group 2 project. There are no biosecurity concerns. After discussion the project was approved unanimously with the following stipulations:

1. Page 1- The IACUC # should be added
2. Question 62 – Should be yes for the animal scanning.

**2025-3-3 Nauli, Surya.** Molecular and Cellular Studies of Ciliopathies
- *Nauli (BUA) - Molecular and Cellular Studies of Ciliopathies*
- *SOP Nauli Viral Vectors*

This project involves the function of cilia in cardiovascular and polycystic kidney disease using organ-specific conditional mouse models. They have identified 10 classes of genes that are differentially expressed between healthy and diseased tissues. The results will be extended by analyzing different cells using siRNA to affect expression. Stable knockdowns will be created using lentivirus, adenovirus and baculovirus vectors. They will work with oncogenes - Survivin, BMPR, Kinesin, and PTPR. Classified as III-D, E and F, and requires IBC approval. Because of the human cells and viral vectors, it is an RG-2 project, and the hepatitis vaccine will be offered. There were no biosecurity concerns. After discussion the project was approved unanimously with the following stipulations:
Page 1 – Not a new project. Change to Renewal and add the BUA number.
Page 1 and question #1. The IACUC numbers do not match and are incorrect.
Question 14b needs the genus/species

## VII. OTHER BUSINESS

## VIII. NEXT MEETING

Next meeting is scheduled for June 8, 2026, at the Rinker campus.