UNIVERSITY OF CONNECTICUT
Storrs, Groton, Hartford, Stamford, Waterbury

INSTITUTIONAL BIOSAFETY COMMITTEE
MEETING MINUTES

Chair: M.A. Amalaradjou
Meeting Time: 1:30 PM

August 7, 2025
Web Conference

Attendance

Voting Members	Role / Expertise	Present	Absent	Comments
Amalaradjou, Mary Anne	*IBC Chair*	X		
Brennan, James	*Animal Care Services*	X		
Cavallaro, David	*BSO, Voting NIH Contact*	X		
Chen, Yupeng	*Biomedical Engineering*		X	
Chidambaram, Ramaswamy	*Animal Expert*		X	
Heyduk, Karolina	*Plant Expert*	X		Joined 1:45 PM
Macierowski, Bobbie	*Local Non-Affiliated Member*	X		
Maltz-Matyschsyk, Michele	*Molecular and Cell Biology*		X	
Miller, Robert	*Local Non-Affiliated Member*	X		
Szczepanek, Steven	*Vice Chair, Pathobiology*	X		
Wright, Dennis	*Pharmaceutical Sciences*	X		
Non-Voting Members				
Delage, Danielle	*IBC Program Director* *NIH Contact*	X		
Lewchik, Brent	*EHS Director*		X	
Lucas, Melanie	*RICS Director*		X	

The IBC has eleven voting members. A minimum of five members are required to conduct business. Eight voting members were present, meeting quorum.

The IBC Chair called the meeting to order at 1:32 PM and opened with the Chair reading the confidentiality statement.

I. Confidentiality Statement:

Members were reminded that all information provided in writing or discussed at this meeting may be sensitive or proprietary and must be considered confidential. In the interest of transparency, IBC meetings remain open to the public whenever possible. However, meetings may be closed to review confidential or sensitive information. Proprietary or private information will not be included in meeting minutes whenever possible, and may be redacted as necessary, prior to public release.

II. Conflict of Interest:

The committee is reminded that no IBC member may be involved in the review *(except to provide information if requested*) or approval of a project for which there are real or perceived direct financial interests. Potential conflicts of interest must be disclosed.

As a reminder, when conflicts are declared, that member is recused from committee discussion and voting portions of the review for that submission.

At this time, members are asked to declare potential real or perceived conflicts of interest with submissions on the agenda.

S. Szczepanek declared conflicts with amendments #388A2P and #6R2A4P. S. Szczepanek will be moved to the WebEx lobby during committee discussion, motions, and votes for applicable submissions.

III. Announcements:

1. The committee was provided updates regarding NIH OSP Notice Number: NOT-OD-25-082.

   - Effective June 1, 2025, IBC Rosters were posted on NIH OSP's Registration Management System (RMS) Website. Only names and roles. Contact information only for the Chair, BSO, and NIH Contact (institutional email addresses).

   - Prior to June 1, 2025, UConn's registration required updates to the committee roster. NIH approved the updated registration.

   - Impacts to IBC Minutes:

     - NIH OSP revised IBC Meetings and Minutes FAQs and developed an IBC Meeting Minutes Template.

     - Key Takeaways:

       → Minutes must be posted publicly; NIH expects immediately after approval.

       → Redactions must be done judiciously. Proprietary or sensitive information will not be included in minutes whenever possible.

       → Consider sending draft minutes to applicable PIs for review of proprietary or confidential information. Comments will be requested within seven days of receipt.

       → UConn IBC Minutes webpage developed and published.

       → June 12th Minutes will be first to be published publicly once approved.

IV. Review of Minutes:

Committee members were provided an opportunity to review proposed minutes from the June 12, 2025 IBC Meeting. Draft minutes were reviewed in detail. The Chair opened the floor for comments. Discussion was held concerning the process for future minute review. A typographical error was identified and will be corrected through administrative revision.

A motion was made to approve the minutes as discussed, which was seconded. The committee voted 6 in favor, 0 opposed and 1 abstention. The abstention recorded was due to the members' absence during the June meeting. MOTION CARRIED

V. Chair Report:

Administrative actions taken by the Chair since the last meeting was presented to the committee. Revisions were received for following submissions previously reviewed, and approvals were finalized:

1. IBC Amendment – #388A1 PI Name: Lawrence Silbart, TIP

1:45 PM – K. Heyduk joined the meeting.

VI. Biosafety Officer Report:

No NIH reportable incidents to discuss. Laboratory audits are conducted periodically to assess facilities and lab practices to ensure compliance with all applicable Biosafety requirements. A summary of recent biosafety audits was presented to the committee.

Audit Report – June & July

- A total of 12 biosafety audits were conducted. 5 audits (42%) were performed in undergraduate teaching laboratories. 8 audits (67%) resulted in no findings.
- The most frequent finding was overdue EHS refresher/retraining.

VII. Review of NIH Covered Experiments

PI Name	Charles Giardina
Submission	Amendment #100R2A1P
Title	Basic Mechanisms of Cancer and Inflammatory Diseases
Project Overview	
Summary of Proposed Project	The lab studies cancer and inflammation using cell lines and mice as models. This amendment adds a gen 3 lentiviral vector that will be used with a library expressing guide RNAs for most human genes to determine which expressed genes have an effect on cancer cell proliferation when in vitro cancer cells are inhibited from replicating using anti-folate compounds.
Agent Name	Lentiviral Vector
Risk Group	RG3
Agent Characteristics	None of note
rsNA Source Organism	Human and *S. aureus* (CRISPR systems)
Nature / Function of rsNA	Library expressing guide RNAs for most human genes
Modifications	guide RNAs encoded by the vector include tumor suppressor gene targets
Experimental Manipulations	In vitro cancer cells are inhibited from replicating using anti-folate compounds

Risk Assessment & Discussion	
High Risk Manipulations	Centrifugation
Risk Mitigation Strategies	BSC, Sealed Centrifuge Cups and Rotors
PPE	Lab Coat, Nitrile Gloves, Safety Glasses, Face Shield
Training & Expertise	All required EHS trainings are up-to-date; PI acknowledged increased risk and has worked with cell lines and other viral vectors in the past
Containment & Practices	BSL-2; containment and practices noted as adequate
NIH Classifications	III-D-1
Primary Review Comments	The lentivirus is gen 3 and poses little risk to staff or the environment. The guide RNAs encoded by the vector include targets that are tumor suppressors, hence BSL-2 practices will be used to minimize exposure of staff to the rsDNA, including use of a class II BSC, centrifuge rotor caps, and proper PPE. Disinfection in 10% bleach or autoclaving solid materials is appropriate.
IBC Discussion & Vote	
Committee Discussion	Enhanced practices were discussed due to the scope of human genome targeted by the library (e.g. tumor suppressors). Since the lab is purchasing the packaged viral vector, the containment and practices described should be sufficient. Double gloves may be considered but will not be required due to the potential for decreased dexterity concerns, which could increase risk to users.
Motion	A motion was made to approve amendment #100R2A1P as written, which was seconded. The committee voted with 8 in favor, 0 opposed, 0 abstentions. MOTION CARRIED
Committee Action	The committee approved amendment 100R2A1P as written for the duration of the registration's approval; with the addition of the following NIH Classification: 1) **III-D-1** (experiments involving rsNA constructs in replication defective **RG3** lentiviral vectors, not involving animals) under **BSL-2** – *enhanced practices include the use of primary containment devices, as described; double gloves may be considered but are not required*

2:01 PM: S. Szczepanek was sent to the WebEx lobby due to a conflict of interest.

PI Name	Lawrence Silbart, TIP
Submission	Amendment #388A2P
Title	Therapeutic Bandage Products Lab
Project Overview	
Summary of Proposed Project	Amendment: Edits project description, inclusion of rsNA survey, addition of new pathogen (*S. aureus*- GFP). Project 1. Therapeutic bandage for treating MRSA skin infections The lab is developing microneedle bandage products containing antibiotics and chemokines to treat superficial MRSA infections in vitro and in vivo. If in vitro models do not work, the lab will substitute with commercial explanted animal skin for ex vivo studies. Application over insect bites to study efficacy against *Borrelia burgdorferi* using an animal model. Induce injury, introduce MRSA and apply microneedle bandage. Specimen samples will be assessed using culture and PCR. Project 2. Lyme Disease Prevention Kit Developing diagnostic tool for *Borrelia burgdorferi* – lateral flow assay. Will employ protein antigens as capture antigens. Lab reared insects will be procured from a national resource research facility. Wild caught insects will be obtained from a collaborator at UMass. Insects will be shipped in a double container, with a rigid inner container that is tightly sealed, with insects contained in a clear zip-lock bag. As an additional precaution each zip lock will include the number of insects and will be shipped on wet ice to keep the insects immobile.
Agent Name	*S. aureus*
Risk Group	RG2
Agent Characteristics	None of note
rsNA Source Organism	Jellyfish *Aequorea victoria*; RG2 *S. aureus*, bacterial bioluminescence
Nature / Function of rsNA	Fluorescent Reporters, Virulence Factors
Modifications	Deletion mutant contains mutation that knocks down virulence factor, inhibiting biofilm production which decreases virulence. Other strains include fluorescent reporters as well as bacterial bioluminescence genes for spontaneous expression.
Experimental Manipulations	In-vitro and in-vivo studies

Risk Assessment & Discussion	
High Risk Manipulations	Sharps Use
Risk Mitigation Strategies	BSC, Sealed Centrifuge Cups and Rotors
PPE	Lab Coat, Nitrile Gloves, Safety Glasses
Training & Expertise	All required EHS trainings must be up-to-date prior to initiation of research
Containment & Practices	BSL-2; ABSL-2
NIH Classifications	III-D-1, III-D-2, III-F-2
Primary Review Comments	All work will be performed in the BSC and PPE will be used. Lab members will wear bright colored disposable coveralls during insect operations, with the sleeves tucked under the plastic gloves. A co-worker will examine the coveralls prior to disposal, immediately after insect work is concluded to reduce the risks of release and personnel exposure. All insects will be handled with stainless steel tweezers, which will be disinfected after each use. Centrifugation will occur outside of the BSC in centrifuges fitted with secondary containment (safety cups) in addition to the use of tightly capped tubes. The lab will use Clorox Disinfecting Mist, Multi-Surface Disinfectant because it contains ethanol and a quaternary ammonium disinfectant. 10% bleach will also be used for the BSC prior to and after use. ABSL-2, filter cages should provide sufficient containment.
IBC Discussion & Vote	
Committee Discussion	Duration of the study was discussed and was unknown at the time of review.
Motion	A motion was made to approve amendment #388A2P with conditions that prior to initiation of research the PI will: 1) ensure IACUC protocols are finalized, 2) personnel are up-to-date with training requirements and 3) revise the project form to include details of animal work including duration of study. The motion was seconded. The committee voted with 7 in favor, 0 opposed, 0 abstentions. MOTION CARRIED
Committee Action	The committee approved amendment #388A2P with conditions, for the duration of the registration's approval; with the addition of the following NIH Classification: 1) **III-D-1** (experiments involving **RG2** *S. aureus* containing rsNA constructs) under **BL2**

PI Name	Steven Szczepanek
Submission	Amendment #6R2A4P
Title	Infectious Disease and Vaccine Development Research
Project Overview	
Summary of Proposed Project	This amendment adds three new animal models, new transgenic animal lines; several new plasmids; animal and human specimen samples; and the pathogens SARS-CoV-2, Wuhan and Omicron variants, Cytomegalovirus and H1N1 and H3N8 Influenza viruses. New materials will be used in projects 6 and 7 of the approved registration. Project 6 uses human samples from CT Children's or UCH respiratory illness patients to isolate and sequence RSV, SARS-CoV-2 and CMV. Isolated viruses will be used to infect animal models for comparative virulence studies. Project 7 describes the collaboration with the Rouge lab to utilize nanoparticle vectors to knock down viral gene expression in hosts (animal models). The new plasmids and mRNA will be delivered by the nanoparticles to express antiviral genes. This will include the use of interferons. These nanoparticles will also deliver vaccine antigens for human influenza, COVID-19, RSV, or bird flu (both low and high path). These vaccines will then be tested for efficacy in animal models of viral challenge for the human respiratory pathogens.
Agent Name	SARS-CoV-2 – Wuhan and Omicron variants, Cytomegalovirus, RSV, and Influenza Viruses H1N1 and H3N8
Risk Group	RG2
Agent Characteristics	Vaccine or Treatment Available
rsNA Source Organism	Antigens for human influenza, COVID-19, RSV, or bird flu (both low and high path)
Nature / Function of rsNA	Knockdown viral gene expression in hosts (animal models); nanoparticles will deliver vaccine antigens for several respiratory pathogens
Modifications	Nanoparticle delivery systems are used to knockdown viral gene expression in hosts, introduce new plasmids and mRNA expressing antiviral genes, as well as vaccine antigens
Experimental Manipulations	In-vitro and in-vivo experiments
Risk Assessment & Discussion	
High Risk Manipulations	Centrifugation
Risk Mitigation Strategies	BSC, Sealed Centrifuge Cups and Rotors
PPE	Lab Coat, Nitrile Gloves, Safety Glasses, Close-Toed Shoes, Shoe Covers, Surgical Mask, Bonnet
Training & Expertise	All required EHS trainings are up-to-date; Personnel have extensive experience working with pathogens
Containment & Practices	BSL-2 and ABSL-2
NIH Classifications	III-D-1

Primary Review Comments	All animal work with zoonotic or human respiratory pathogens is done at ABSL-2 with HEPA filtered cage rack systems for housing. Only small volumes of each virus will be present in the lab. The practices and PPE described in the pathogen forms are appropriate for work with RG2 agents at BSL-2.
IBC Discussion & Vote	
Committee Discussion	Respiratory protection was discussed. The lab is not planning to conduct procedures that increase the risk of aerosolization (e.g., intranasal injection), and primary containment will be used. The committee discussed that respiratory protection is not necessary for the work described.
Motion	A motion was made to approve amendment #6R2A4P as written, which was seconded. The committee voted with 7 in favor, 0 opposed, 0 abstentions. MOTION CARRIED
Committee Action	The committee approved amendment 6R2A4P as written, for the duration of the registration's approval period, with the addition of the following NIH Classifications: 1) **III-D-1 or III-D-4** (experiments involving **RG2** viruses - SARS-CoV-2, Cytomegalovirus, Respiratory Syncytial Virus, Influenza Virus, including animal models) under **BSL-2 / ABSL-2**

2:22 PM: S. Szczepanek returned to the meeting.

VIII. Old Business:

1. The committee was informed of a new enhanced bio-materials function available for HuskySMS, which may resolve significant, longstanding concerns for the IBC Program. Transitioning to the enhanced platform would require manual entry of all data in the system. A survey will be sent to committee members to assess various perspectives on the database.

IX. New Business:

1. Recent review of the NIH Guidelines include new and expanded scope of oversight for Section III-D-4 activities. Updates to guidance documents, and forms will be provided to the committee.

X. Items from the Floor:

1. The committee was informed that the Primary Reviewer Form must be revised to align with the NIH's updated requirements for IBC meeting minutes. The revised form will be distributed to the committee for review and comment prior to implementation.
2. No public comments.

Chair made a motion to adjourn, which was seconded. Meeting adjourned at 2:33 PM.

Next meeting scheduled for September 4, 2025 at 1:30 PM via web conference.
