

University of Toledo
Institutional Biosafety Committee

Date: July 16, 2026

Meeting time: 12.00 pm- 2.00 pm

Meeting type: Hybrid (Microsoft Teams and HEB 233)

Attendees/Roster:

Member	Attended	Voting	Scientific	Affiliated
DeLaSerna, Ivana	Yes	Yes	Yes	Yes
Dinardo, Robert S	Yes	Yes	Yes	No
Dudley, Richard	No	Yes	Yes	No
Gray, John	No	Yes	Yes	Yes
Kalinoski, Andrea L.	Yes	Yes	Yes	Yes
Leisner, Scott M.	Yes	Yes	Yes	Yes
Peseckis, Steven M.	Yes	Yes	Yes	Yes
Pillai, Mahesh R	Yes	Yes	Yes	Yes
Rohrs, Skylar Lee	Yes	Yes	Yes	Yes
Root, Lisa Jane	Yes	Yes	Yes	Yes
Shemshedini, Lirim	No	Yes	Yes	Yes
Shupp, Andrew Charles (Alt)	No	No	Yes	Yes
Taylor, Roger Travis	Yes	Yes	Yes	Yes
Wooten, Ronald Mark	Yes	Yes	Yes	Yes
Guests : None				
IBC staff: Dissanayake, Ravindika				

Quorum: Present

There were (9) voting members present, and (7) members are required to conduct business.

Call to Order: The IBC Chair called the meeting to order at 12.01 pm

Review and approval of previous minutes:

Date of the meeting minutes to be approved. May 21, 2026

- **Discussion:** None
- **Motion:** The committee approved the unredacted April meeting minutes as written.
- **Votes:** For/Against/Abstain: 9/0/0

Old Business:

- None

New Business/Additional Topics:

- Dr. Pillai informed the committee that IBC office is working on the storage-only xForm.
- He also provided an update on the DURC policy.

Protocol Review

IBC #500090- Renewal	P.I.: Dr. Yuan Tang	Training: IBC Laboratory Safety Training IBC Biosafety Training	Biosafety Level Assignment: BSL-2
Title: Targeting chemotherapy-induced inflammation for the prevention and treatment of breast cancer metastasis			
<u>Project Overview:</u> This study utilizes a microfluidic co-culture of human endothelial and breast cancer cells to recapitulate the tumor microenvironment and evaluate how varying concentrations of the cell-permeable protein kinase C delta inhibitor (PKCd-TAT) modulate tumor-stroma interactions.			
<u>NIH Guideline Section</u> Not applicable. Recombinant and Synthetic DNA are not involved			
<u>Risk Assessment and Discussion</u> Types of biological materials and hazards associated with this protocol include Primary Human Umbilical Vein Endothelial Cells, from commercial sources (ATCC, catalog# PCS-100-013™), human breast cancer cell line MCF-7, human breast cancer cell line MDA-MB-231 and human breast cancer cell line SUM-159PT. Human endothelial cells and human breast cancer cells will be treated as potentially infectious and handled using BSL-2 practices, engineering controls, and facilities. All procedures will be performed in a biological safety cabinet (BSC) for culturing activities. Personal protective equipment (PPE) including, but not limited to, laboratory coats, gloves, and eye protection will be worn in our Biofluidics laboratory and additional PPE (face shield, face mask) will be added as indicated if necessary. All waste culture material will be decontaminated before disposal. All laboratory members will be enrolled in an occupational medical program specific for bloodborne pathogens, work under the policies and guidelines established by the institution's Exposure Control Plan (ECP). All personnel working with chemotherapeutic agents will wear double chemotherapy-tested gloves and chemo gowns.			

Occupational Health Representative review (if applicable):

- Include information about transporting between campuses, ie: A dedicated vehicle will be used exclusively for the transport of biological agents between campuses. The vehicle will not be used to transport individuals who are not involved in the research and will not make any unrelated stops or perform other errands while biological agents are being transported.
- Add Health Science Campus to list of locations

IBC vote:

A member made a motion for Modifications required for approval, then Designated Member Review (Chair only). Another member seconded. The required modifications were:

1. Update the locations where the experiments are performed.
2. If using confocal please add SOP found on the IBC website and add section specific to your experiments.

Total Votes: 9, For: 9, Against: 0, Abstain: 0

[Mr. DiNardo joined the meeting at 12.22 PM, total voting members 10, quorum was maintained]

IBC #500094 - Renewal	P.I.: Dr. Charles Thodeti	Training: IBC Biosafety Training and IBC Laboratory Safety Training	Biosafety Level Assignment: BSL-2
Title: Role of TRPV4 Channels in Cardiovascular Development and Function			
<u>Project Overview:</u> Novel therapies based on molecular mechanistic studies need to be developed to advance the treatment of coronary heart disease. The research team will focus on addressing the question of how mechanical factors and their signaling affect the inflammation, cardiovascular diseases. They have found that their TRPV4 global knockout mice are protected from MI and hypertrophy, and now the objective of the project is to determine how the TRPV4 mediated mechanotransduction protects the hearts from myocardial injuries (ischemia-reperfusion, TAC/heart failure) and to test whether each of these injuries can be protected using either cell-specific mouse model or pharmacological inhibitors to abolish the TRPV4 function. Previously the team found that TRPV4 modulates Rho pathway in vitro, In this protocol they would be determining the TRPV4 regulation of Rho pathway in the heart failure in vivo models using Rho activators (CN03).			

The major objective of this research project is to investigate the role of TRPV4 mechanotransduction in cardiovascular function (i.e. angiogenesis, vascular tone, fibrosis, tissue remodeling and inflammation in physiology and pathology). To achieve this, the research team will be using various rDNA/siRNA and pharmacological activators/inhibitors in human/mouse cells to delineate the signaling mechanisms. This is the standard practice in the research. In order to understand the TRPV4 mechanotransduction on coronary angiogenesis in human and mouse cells (Primary as well as Cell lines listed in B.3). The study team would like to transfect the plasmids VEGFR2-YFP, VEGFR2-mCh, ptfLC3, EGFP-LC3, DsRed-Mito, TRPV4 CRISPR Knockout plasmid, HDR plasmid and elucidate the underlying mechanisms.

NIH Guideline Section

NIH Guidelines Section II-A.1, Section III-D-1-a.

Risk Assessment and Discussion

Types of biological/chemical hazards associated with this protocol are as follows,

- CN03-Rho activator
- Rapamycin
- AICAR
- Compound C
- Yoda1
- GsMTx-4
- Animal and human cell lines
- Tissues from mice experiments
- E. Coli (MG1655; DH5alpha)
- Plasmids

Potential risks include sharps injuries, handling viral vectors, risk of exposure to biohazard material. The committee discussed the proposed precautions outlined in the protocol, such as PPE requirements, using proper microbiological techniques, and use of biosafety cabinets, and determined that the proposed precautions are appropriate and sufficient.

Occupational Health Representative review (if applicable):

- None

IBC vote:

A member made a motion for 'Modifications required for approval, then Designated Member Review (Chair). Another member seconded. The required modifications were:

1. Add the IVIS SOP from the IBC website. Please update the SOP with your experimental details.
2. Add AAV experiments mentioned in animal section here.
3. Add Lentivirus and adenovirus to list of hazards.
4. Add AAV policy document
5. Update locations
6. Please add the vendor in Column 2, "Name of source" in Section D.5.
7. B16F10 is a melanoma cancer cell line not LLC.
8. Please clarify whether adenovirus is used or not?
9. Update ABSL2 door sign

Total Votes: 10, For: 10, Against: 0, Abstain: 0

[Dr. Wooten left the meeting at 12.48 PM due to COI, total voting members 9, quorum was maintained]

[Dr. Kalinoski chaired the meeting]

IBC #103716 - Renewal	P.I.: Dr. Mark Wooten	Training: IBC Biosafety Training and IBC Laboratory Safety Training	Biosafety Level Assignment: BSL-2
<u>Title:</u> Host/Pathogen Interaction in Lyme Disease			
<u>Project Overview:</u> <i>Borrelia burgdorferi</i> is a spirochetal bacterium that is the causative agent of Lyme disease. The overall goal of the study is to better understand the interactions between <i>B. burgdorferi</i> and host immune cells that lead to the development of Lyme disease.			
<u>NIH Guideline Section</u> Not applicable. Recombinant and Synthetic DNA are not involved			
<u>Risk Assessment and Discussion</u> Types of biological/chemical hazards associated with this protocol are as follows, • <i>B. burgdorferi</i> (bacteria) • <i>I. scapularis</i> (ticks) • Primary mouse cells (non-transformed) • <i>M. musculus</i> tissues (both uninfected mice and mice infected with <i>B. burgdorferi</i>)			

While *B. burgdorferi* is a BSL2-level pathogen, it can only be transmitted if introduced into or across the skin layers. There has been no reported transmission via skin contact, droplet, respiratory, or ingestion. Thus, all protocols that involve using live *B. burgdorferi* under potentially transmissible conditions will be performed within a biological safety cabinet and wearing appropriate personal protective equipment, including thimbles to protect from needle sticks during *B. burgdorferi* injections. Experiments involving ticks will be performed under BSL2 conditions with added enhancements to prevent tick escape. During tick feeding on infected mice, ticks will be placed into closed, affixed chambers on mouse backs for 48 hours. Upon harvesting, ticks will be counted to ensure that all are accounted for. Double-sided tape will be placed around the inside rim of each mouse cage to prevent any escaped ticks from crawling to the top and escaping during cage opening. Additionally, double-sided tape will be on the floor near the door and a tacky mat will be outside the door of the room where the tick experiments are performed, further protecting against the possibility of tick escape. While not feeding ticks will be housed in a lidded chamber, stored inside a desiccation chamber inside of a modified incubator. Double-sided tape will be on the inner edges of the incubator to prevent tick escape. In the unlikely event of tick escape, incident reports will be filed.

Occupational Health Representative review (if applicable):

- Note in H.3.2.1.5 how transport of now "biohazardous" ticks from DLAR who have fed on infected mice will occur.
- Provide any information or SOP's on the process if you discover a missing tick?
- Update ABSL2 door sign

IBC vote:

A member made a motion for 'Modifications required for approval, then Designated Member Review (Vice Chair). Another member seconded. The required modifications were:

1. Remove DLAR room numbers

Total Votes: 9, For: 9, Against: 0, Abstain: 0

Biosafety Officers' Report:

- Mr. Rohrs

Review of incidents: none

Inspections/Ongoing oversight: none

IBC training for members: none

Public comments: none

Adjournment: The IBC Chair moved to adjourn the meeting at 1.09 PM. The next meeting is scheduled for August 20, at 12.00 PM via MS Teams and in-person (HEB 233).