



Institutional Biosafety Committee

UNTHSC IBC Meeting Minutes
June 18, 2025
12:02 pm – 1:10 pm
Teams meeting

Members in Attendance

Rance Berg – IBC Chair
Maya Nair -*IBC Coordinator for the meeting*
Mike Chumley (Community member)
Egeenee Daniels -UNTHSC member
Jayoung Kim - UNTHSC member
Raghu Krishnamoorthy - UNTHSC member
Richard McKee- UNTHSC member
Christopher Parker (Community member)

Members Absent

Anne-Sophie Brocard (UNTHSC member)

Quorum – Present

Other individual in Attendance

None

IBC Chair called the meeting to order at 12:02 PM

The IBC Chair reminded all members present to identify any conflicts of interest as each registration is reviewed.

I. Minutes Approval:

April IBC meeting minutes were approved with minor corrections (Specify the membership role/ institution and expand the abbreviations).

Yes: 6 No: 0 Abstained: 2 Total:8 Recusals: 0

May IBC meeting minutes were approved with minor corrections (Specify the membership role/ institution and expand the abbreviations).

Yes: 4 No: 0 Abstained: 4 Total:8 Recusals: 0

II. Discussions of prior business and updates to the committee:

Dr. Nair, BSO presented a new IBC form for registration for storage only of biological material and handling of healthy animal tissue for IBC membership review and approval. Once approved the form will be made available for use.

The form was approved:

Yes: 8 No: 0 Abstained: 0 Total:8 Recusals: 0

III. Submissions for Convened Review

1. Protocol Number: IBC/p/AS/2025-1
Protocol Title: Identifying Mechanisms and Treatments for Obesity-related Deficits in Cardiovascular Regulation and Cognition
PI: Ann Schreihofner, Ph.D.
Biosafety Level: BSL1
NIH Category: IID-4
Training: PI and the Research Personnel listed in this protocol have completed all the required trainings
Exposure plan and health surveillance: PI provide adequate exposure plan and health surveillance information
Committee recommendation: Requires Modification to Secure Approval
Vote: Yes: 8 No: 0 Abstained: 0 Total:8 Recusals: 0

Summary:

In anesthetized rats, we will target one brain region by injecting a viral vector that encodes light-sensitive channels in neurons in that region of the brain. This viral vector will not spread from neuron to neuron or cause impairment of the neuron's functions. Rats will be returned to their home cage for several weeks to allow the viral vector to spread through the neuron and insert light-sensitive ion channels into the cell membrane. Then, these rats will be anesthetized and prepared for recording sympathetic nerve activity and blood pressure. We will selectively excite or inhibit the neurons containing light-sensitive channels by shining light into that region of the brain while recording sympathetic nerve activity, blood pressure, and sympathetic reflexes. Some rats will be treated to reduce dietary salt, glucose, or blood pressure to determine whether these traits are altering neuron

activity within the brain to raise blood pressure. Then, the anesthetized rats will be euthanized by approved methods. Brain tissue will be fixed with formaldehyde and collected for later analyses of the labeled neurons. These studies will provide novel insights into how obesity alters the sympathetic control of blood pressure by the brain.:

Modifications requested:

The following modifications are requested to secure approval:

- Simplify text in the lay summary section
- #6 Provide the containment level for the procedures.
- #8 Provide details on the in vitro work
- #8b indicate that respiratory protection will not be needed for this project
- #8 provide details on biological and chemical spill response.
- Appendix 1 need to complete the table.
- Provide a signed copy of the protocol

2. Protocol Number:	IBC/p/CR/2025-1
Protocol Title:	Collection of human blood and urine samples in assessment of physiological responses to stress.
PI:	Caroline Rickards, Ph.D.
Biosafety Level:	BSL2
NIH Category:	IIIDF
Training:	PI and the Research Personnel listed in this protocol have completed all the required trainings
Exposure plan and health surveillance:	PI provide adequate exposure plan and health surveillance information
Committee recommendation:	Requires Modification to Secure Approval
Vote:	Yes: 8 No: 0 Abstained: 0 Total:8 Recusals: 0
Summary:	Studies conducted in the Rickards laboratory involve recruitment and testing of healthy human participants for assessment of integrated physiological responses to a variety of stressors, including, but not limited to, simulated hemorrhage and exercise. Venous blood samples are routinely collected for assessment of circulating mediators (including, but not limited to, catecholamines, nitric oxide, inflammatory mediators, and markers of oxidative stress). Urine samples are collected by female participants for use in urine pregnancy tests, as any participant who is pregnant is excluded from our studies.

Modifications requested:

The following modifications are requested to secure approval:

- In the lay summary section provide a brief description of how the samples are tested
- #5 Need elaboration of testing process.

- #8 Add a section on how the collected samples are collected
- Provide a signed copy of the protocol

3. Protocol Number: IBC/p/JK/2025-1

Protocol Title: Using rabbit and pig eye globe to study collagen cross-linking treatment used in keratoconus

PI: Jayoung Kim, Ph.D.

Biosafety Level: BSL1

NIH Category: IIDF

Training: PI and the Research Personnel listed in this protocol have completed all the required trainings

Exposure plan and health surveillance: PI provide adequate exposure plan and health surveillance information

Committee recommendation: Requires Modification to Secure Approval

Vote: Yes: 8 No: 0 Abstained: 0 Total:8 Recusals: 0

Summary:

Keratoconus is a corneal disorder, in which cornea thins and softens to result in the bulging of the cornea to a cone-like shape. This progressive disease will result in blindness if left untreated, and there are a few different interventions carried out in the clinic. One clinical treatment involves ultraviolet (UV) exposure to the eye to stiffen the cornea and prevent further disease progression. One of the concerns with this treatment is the potential damage to the underlying tissue in the cornea due to deep UV penetration. Our lab is developing a 3D-printed contact lens that can be placed on top of the patient's eye to control the UV intensity so that sufficient UV is exposed to the cornea for treatment effect while preventing too much UV from penetration for safety. In order to test our device, we like to use intact cornea in an eye globe to place the contact lens, shine UV, and measure the stiffening. We will purchase harvested eye globes from rabbits and pigs from vendors specialized in providing these specimens to research laboratories, and use them fresh as they arrive. We will take appropriate procedures to handle these specimens in conducting the following experiments: 1) 3D scanning to create shape-matched contact lens, 2) corneal epithelium removal, 3) placing the contact lens and following the standard protocol for the UV treatment, 4) dissecting cornea, and 5) either embedding in paraffin for histology or using atomic force microscopy instrument to measure stiffness.

Modifications requested:

The following modifications are requested to secure approval:

- #4 Please complete the table for Personnel – Functions
- #8 Please reword the biological spill response.- “Change the word “spray” to “pour”
- Provide a signed copy of the protocol

4. Protocol Number: IBC/p/JK/2025-1
Protocol Title: Aging, stroke and neurodegenerative disease
PI: Jin Kunlin, Ph.D.
Biosafety Level: BSL2
NIH Category: IIDF
Training: PI and the Research Personnel listed in this protocol have completed all the required trainings
Exposure plan and health surveillance: PI provide adequate exposure plan and health surveillance information
Committee recommendation: Requires Modification to Secure Approval
Vote: Yes: 8 No: 0 Abstained: 0 Total:8 Recusals: 0

Summary: We are studying how stroke and brain diseases like Alzheimer’s develop and how to treat them. To do this, we will use donated human brain tissue from brain banks. We will examine these tissues using lab methods to better understand the biological changes that occur during disease. We will also study brain stem cells in the lab to see how they might protect the brain. These cells will come from animals and help us learn more about how brain repair works. Another focus of our study is on tiny particles called exosomes, which are found in blood and brain tissue. These exosomes can carry signals between cells and may help the brain recover after a stroke or injury. We will collect exosomes from the blood of young and old animals and test whether they help or harm recovery from stroke in animals. The exosomes will be given to the animals by injecting them into the blood or directly into the brain, either before, during, or after a stroke is induced.

Modifications requested:

The following modifications are requested to secure approval:

- Simplify text in the lay summary section
- #2 check No to human cells
- #2 Please provide IACUC protocol number
- #2 Please provide IRB protocol number
- #5 Please provide animal study location.
- #8 Please remove the in vivo study information from the IBC protocol.
- #8 Please complete the table for each hazard mention in the protocol.
- #8b Please add that you will report the exposure incident to BSO
- # 8 in immunization section include tetanus vaccination for researchers conducting animal work.
- Provide a signed copy of the protocol

IV. Response to Requires Modification to Secure Approval- None

V. Amendments approved Administratively: None

Public comments: There were no public comments.

Adjournment: IBC chair moved to Adjourn the meeting at 1:10PM

Name:	IBS Chair	IBC Coordinator
	Rance Berg, PhD	Maya Nair, PhD
Signature:	 Signed by: 4E3708F2FE464AA...	 Signed by: 27BA3AE2333846B...
Date:	7/16/2025	7/16/2025