

**The University of Texas Health Science Center at Houston (UTHealth Houston)
Institutional Biosafety Committee
December 11, 2025
Minutes**

Meeting Attendance:

Voting Members

**Dr. Catherine Denicourt (Chair)
Dr. Eric Brown
Dr. Nancy Crider
Dr. Carolyn Grimes
Dr. Nicholas Justice
Dr. Ashish Kapoor
Dr. Yang Liu
Dr. Yahuan Lou
Dr. Duc Nguyen
Dr. Eunsu Park
Dr. Scott Patlovich
Dr. Jose Portugal
Mr. Spencer Chichester (SM)
Mr. Petko Ivanov (CM)
Mr. Jesus Duran Ramirez (SM)
Mrs. Marivonne Rodriguez (CM)**

Non-Voting Members

**Dr. Joy Harrison
Dr. Kristin King
Dr. Mary Robinson
Mr. Zack Becker
Mr. Alan Lucas
Ms. Rebecca Kairis
Ms. Allison Lino
Ms. Meredith Mills**

1. Call to Order

The meeting was called to order by Dr. Denicourt at 3:01 PM.

2. Conflicts of Interest

The Chairperson reminded the committee about the conflict of interest procedure. She also reminded the committee members that all protocols that are discussed at the meeting are to be considered confidential and are not to be discussed outside of the meeting with non-IBC members.

3. Review Previous Meeting Minutes (November 13, 2025)

Approved = 13
Opposed = 0
Abstained = 3

4. IBC Administrative Items

Dr. Jose Portugal will be joining the IBC committee to replace Dr. Napoli. Dr. Portugal's experience is in infectious diseases and internal medicine.

Recombinant or Synthetic Nucleic Acid Molecules Research Applications Review

During the review the committee assessed the containment levels as well as the facilities, procedures, practices and training and expertise of the personnel involved in recombinant or synthetic nucleic acid molecules research. The committee also reviewed agent characteristics, types of manipulations planned, sources of the inserted nucleic acid sequences, the nature of the inserted nucleic acid sequences and whether an attempt will be made to obtain expression of a foreign gene, and if so, the protein that will be produced. Furthermore, the PI must determine the applicable section(s) of the *NIH Guidelines*.

5. Clinical Protocol Reviews (HGT)

None

6. Protocol Reviews

IBC-25-092 – Dr. Steven Norris – “Mouse Model of Lyme Borreliosis” AND “Structure-Function Relationships in the Spirochetal Flagellar Motor”

Containment Level: BSL-2; ABSL-1 (no risk of shedding from animals)

NIH Section: III-D-1-a, III-D-2-a

Training status: Personnel listed on the protocol are current on safety training requirements

Approved = 16

Opposed = 0

Abstained = 0

The protocol was presented and approved, with clarification that the work does not meet the definition of “dangerous gain-of-function research” as defined in the May 5, 2025 Executive Order.

IBC-25-102 – Dr. Qing Yun Liu – “A preclinical development core for large molecule therapeutics” AND “Integrating proteolysis-targeting capability into antibodies to augment therapeutic efficacy” AND “Drug conjugates of modified LGR4/5/6 ligands for cancer treatment”

Containment Level: BSL-2; ABSL-2 for 5 days after lentiviral administration

NIH Section: III-D-1-a, III-D-2-a, III-F-8

Training status: Personnel listed on the protocol are current on safety training requirements

Approved = 16

Opposed = 0

Abstained = 0

The protocol was presented and approved, pending submission of lentiviral SOP.

IBC-26-022 – Dr. Joo Eun Jung – “Role of Astrocyte in Brain Rejuvenation” AND

“Pathobiology of ICH in Aging”

Containment Level: BSL-1; ABSL-1

NIH Section: III-D-4-a, III-E-3

Training status: Personnel listed on the protocol are current on safety training requirements

Approved = 16

Opposed = 0

Abstained = 0

The protocol was presented and approved with no additional recommendations.

7. Conditionally Exempt Protocol Reviews

IBC-26-019 – Dr. Shervin Assassi – “Combined Optical Coherence Elastography and Tomography for Assessing Skin Involvement in Systemic Sclerosis”

IBC-26-021 – Dr. Mohammad Milad – “Neural Correlates of Active Avoidance Learning and Their Interactions with Fear Extinction Mechanisms in PTSD Patients” AND “Neuromodulation of Fear Extinction Circuit Using Temporally and Anatomically Specific TMS in Humans”

IBC-26-023 – Dr. Changqing Ju – “Immune Monitoring and Assay Development in Organ Transplant Recipients: A Clinical Hepatobiliary, GI, and GU Biobank.”

8. Protocol Updates

a. Significant updates:

IBC-22-058 – Dr. Dung-Fang Lee – “Model Li-Fraumeni syndrome with induced pluripotent stem cells” AND “Dissecting the Biology and Therapeutic Vulnerabilities of RB1-Mutant Osteosarcoma Using RB iPSCs” AND “The Epitranscriptomic Pathway is a Therapeutic Vulnerability in p53-mutant Osteosarcoma”

- **Addition of work:** Addition of work related to the injection of mouse cancer cell lines (mos-H76, mos-0263, mos-752, mos-H318, mos-222, mos-155, 4T1, E0771, and 005) to p53R172H/+ and p53R172H/R172H mice, and using human cancer cell lines (IBC-3, SUM-149, SUM-190, and FC-IBC-02) for in-vitro assays.
- **Addition of bioagents:** Human cancer cell lines (IBC-3, SUM-149, SUM-190, and FC-IBC-02); Mouse cancer cell lines (mos-H76, mos-0263, mos-752, mos-H318, mos-222, mos-155, 4T1, E0771, and 005)
- **Addition of rDNA:** U6-shRNA, pcDNA vector, sgRNA/TALEN plasmids
- **Addition of animals:** Mice (p53R172H/+)

Containment Level: BSL-2; ABSL1

NIH Section: III-D-1-a, III-F-8

Training status: Personnel listed on the protocol are current on safety training

requirements

Approved = 16

Opposed = 0

Abstained = 0

The protocol was presented and approved with no additional recommendations.

IBC-23-086 – Dr. Rodrigo Morales – “Shedding, retention and spreading of chronic wasting disease prions in the environment” AND “Systematic evaluation of the zoonotic potential of different CWD isolates” AND “Evaluation of surface-bound prions in disease transmission” AND “Assessment of PMCA and RT-QuIC for CWD diagnosis in animal and environmental samples”

- **Addition of work:** Evaluation of CWD uptake from soil into plants (for human consumption or deer consumption) for PMCA and infection in transgenic mice.

Containment Level: BSL-2 enhanced; ABSL2 enhanced

NIH Section: N/A

Training status: Personnel listed on the protocol must complete training requirements

Approved = 16

Opposed = 0

Abstained = 0

The protocol was presented and approved, with additional recommendations for mitigating water spillage.

IBC-25-074 – Dr. Zhongcong Xie – “Effects of anesthesia and surgery on brain function”

- **Addition of rDNA:** CMV::Cas9-P2A-GFP and U6::sgTau expression cassettes
- **Addition of work:** Addition of in vivo work involving direct administration of lentiviral vector targeting Cas9 and GFP into C57BL/6 mice.

Containment Level: BSL-2; ABSL-2 for 5 days after lentiviral administration

NIH Section: III-D-4-a

Training status: Personnel listed on the protocol are current on safety training requirements

Approved = 16

Opposed = 0

Abstained = 0

The protocol was presented and approved, pending completion of N95 respirator fit testing (N95 to be used for viral vector administration outside of containment)

b. Administrative updates:

IBC-21-061 – Dr. Mark Burish – “The Will Erwin Headache Research Center study of cluster headache and trigeminal neuralgia (WEC): A cellular model of cluster headache: human fibroblasts to study circadian rhythms”

- **Addition of personnel:** Emma Freeman and Jane Nguyen

IBC-21-068 – Dr. Xin Ge – “Therapeutic Monoclonal Antibodies Inhibiting Proteases of Biomedical Importance” AND “Protease Activated Bi-Specific Antibody Prodrugs for Efficient Transportation Across Blood-Brain Barrier”

- **Addition of bioagents:** Human Cell lines (A-375, peripheral blood mononuclear cells)
- **Removal of personnel:** Afshin Ebrahimpour, Pablo Martinez Gomez
- **Addition of personnel:** Xiaozhuo Yu, Jia-Shiun Leu, Sushma Krishnan
- **Addition of location:** SRB 5010

IBC-21-074 – Dr. Zheng Chen – “Identification and Characterization of Small Molecules as Chemical Probes of the Circadian Clock” and “Small Molecule Probes of Circadian Coordination of Cardiometabolic Functions” and “Rescue of GI functions in Clock^{m/m} Mutant Mice by Clock-enhancing Compounds” AND “Molecular Mechanisms of Action of Clock-modulating Small Molecules” AND “Role of Clock-Modulating Small Molecules against Aging” AND “Regulation and function of the circadian factor Period 2” AND “Molecular Mechanism of a clock-enhancing natural product” AND “Function of CRY and FAD in nutrient sensing” AND “A FAD-driven biochemical oscillation governing CRYPTOCHROME turnover” AND “Role of the circadian oscillator in AD neuropathological and behavioral alterations” AND “Functional crosstalk between brain circadian oscillators and AD pathology in mouse models” AND “Identification of endogenous ROR ligands as modulators of aging clock and physiology” AND “Concerted enhancement of core and output rhythms to promote healthy aging” AND “Role of RORs in age-related circadian and metabolic alterations” AND “Mammalian circadian rhythms: from genes to mechanisms” AND “Regulatory role of the CRYPTOCHROME-FAD axis in mitochondrial bioenergetic oscillation” AND “Circadian pathways linking metabolic homeostasis and gene regulation during aging” AND “Regulation of headache pain responses by the Trigeminal ganglion clock” AND “Circadian regulation of mitochondrial function by muscle RORs to promote healthy aging”

- **Removal of personnel:** Marvin Wirianto and Eunju Kim
- **Addition of personnel:** Emma Freeman and Jane Nguyen

IBC-21-076 – Dr. Ali Azhdarinia – “Molecular Imaging Probe Development”

- **Addition of work:** Imaging studies involving mouse PDX tumor models coming from Champions Oncology
- **Addition of bioagents:** PDX-Derived cancer cells
- **Addition of mouse strain:** Nu/Nu bearing PDX tumors
- **Addition of CSC protocol:** CSC-23-029
- **Addition of CPHS protocol:** HSC-MS-25-0720
- **Addition of AWC protocol:** AWC-25-0090
- **Removal of personnel:** Hongyu Wang
- **Addition of personnel:** Federica Pisaneschi
- **Addition of locations:** SRB 214, 303, 304

IBC-22-042 – Dr. Romain Harmancey – “Novel regulatory mechanisms of cardiac remodeling in heart failure”

- **Addition of bioagent:** AAV9 vectors expressing mouse Meg3 shRNA
- **Updated AWC protocol:** AWC-25-0022

IBC-23-018 – Dr. Sunil Krishnan – “Rational translation of gold nanoparticle mediated radiosensitization to the clinic” AND “Enhancing immune mediated head and neck cancer anti-tumor activity using nanoparticles” AND “Enhancing Chemoradiation Efficacy through Unbiased Drug Discovery Approaches” AND “Triggered expression of cellular stress signals followed by guided delivery of cytotoxic payloads - a novel paradigm with broad anti-cancer applicability”

- **Addition of bioagents:** Anti-CD4, Anti-CD8, Anti-NK1.1 and mouse IgG isotype antibody
- **Addition of animal strain:** Balb/c mice

IBC-24-069 – Dr. Brian Skaug – “Pathogenic effects of DNASE1L3 R206C polymorphism in systemic sclerosis pathogenesis”

- **Addition of Personnel:** Sebby Leung

IBC-25-030 – Dr. Lindsay Holzapfel – “Comparing Lipid Emulsion Composition to Minimize Bronchopulmonary Dysplasia and Neurodevelopmental Impairment in Extremely Preterm Infants: A Randomized Controlled Trial”

- **Room Change:** Remove MSB 3.606, Add MSB 3.400
- **Removal of Personnel:** Maria del Mar Romero Lopez and Erica Underwood

IBC-25-042 – Dr. Guangwei Du– “Lipid Signaling” AND “**Lysosomal NADPH metabolism regulates proteostasis, aging and tauopathy**”

- **Addition of bolded title**

IBC-25-047 – Dr. Erin Loggins– “Intracanal Medicaments and their Solvent and Antibacterial Effects”

- **Addition of Personnel:** Erin Balaban

9. BSL-3 Update

A meeting was held on December 2, 2025, to discuss the scope of the “commissioning.” All preventative maintenance will be done as normal, BSC certification, equipment maintenance, and any corrective actions (paint chips) that would impact AAALAC (Fall 2026).

10. Biological Safety Program Activity Report

The Biological Safety Program Activity Report was included in the packet for review.

11. Environmental Protection Program Activity Report

The Environmental Protection Program Safety Program Activity Report was included in the packet for review.

12. Other Items

A follow-up from last month: Dr. Wu's experiment, using AAV to express the light chain of tetanus toxin, is considered III-B; we are still awaiting approval from the NIH OSP.

The annual Health Fair (for CLAMC, SHERM, FPE, BSL-3, and NHP staff) was completed on December 9, 2025. This is organized by SHERM and allows for updates on training, occupational health, fire extinguisher training, respirator fit testing, and steel-toed shoes.

The IBC committee was informed about upcoming listening sessions for the NIH Initiative on Modernizing Biosafety.

13. Next Meeting

The meeting is scheduled for January 8, 2026, via Microsoft Teams from 3:00 PM to 4:00 PM.

14. Adjournment

The meeting was adjourned by Dr. Denicourt at 4:03 PM.