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

**Meeting Attendance:**

| Voting Members | Non-Voting Members |
|---|---|
| **Dr. Catherine Denicourt (Chair)** | **Dr. Joy Harrison** |
| **Dr. Eric Brown** | **Dr. Kristin King** |
| **Dr. Nancy Crider** | **Dr. Mary Robinson** |
| **Dr. Carolyn Grimes** | **Mr. Zack Becker** |
| **Dr. Sigmund Hsu (Ad Hoc)** | **Ms. Rebecca Kairis** |
| **Dr. Nicholas Justice** | **Ms. Allison Lino** |
| **Dr. Yang Liu** | **Ms. Meredith Mills** |
| **Dr. Yahuan Lou** | |
| **Dr. Emma Napoli** | |
| **Dr. Duc Nguyen** | |
| **Dr. Eunsu Park** | |
| **Dr. Scott Patlovich** | |
| **Dr. Brett Perkison** | |
| **Mr. Spencer Chichester (SM)** | |
| **Mr. Jesus Duran Ramirez (SM)** | |
| **Mr. Petko Ivanov (CM)** | |
| **Mr. Imad Khalil (CM)** | |
| **Ms. Marivonne Rodriguez (CM)** | |



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 (August 14, 2025)**

   Approved = 17
   Opposed = 0
   Abstained = 0

4. **IBC Administrative Items**

   Review of IBC-related policies
   1 – IBC Policy

   2 – PI Responsibilities

   3 - DURC and PEPP

4 – Fully and Conditionally Exempt Protocols

5 – Accidental Spills – Loss of Containment

6 – Accidental Spills – Personal Contamination

Approved = 17
Opposed = 0
Abstained = 0

IBC Member Training to be released September 19, 2025

Notification of the NIH announcement "Modernizing and Strengthening Oversight of Biosafety"

**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-25-067 – Dr. Oleh Pochynyuk – "Significance of Epac signaling in renal Na+ handling and hypertension; Role of Cl- transport in the collecting duct in blood pressure control and acid-base balance; Sex-dependent regulation of urinary volume by Epac isoforms"

Containment Level: BSL-2; ABSL-1
NIH Section: III-D-1-a, III-E-3, III-F-8
Training status: Personnel listed on the protocol are due for required safety training
Approved = 17
Opposed = 0
Abstained = 0

The protocol was presented and approved with the completion of required safety training; no additional recommendations.

IBC-25-068 – Dr. Peter Rady – "Molecular studies on the role of human papillomaviruses (HPV), human herpes virus (HHV), and human polyomaviruses

(HPyV) in different diseases”

Containment Level: BSL-2; no animal work
NIH Section: III-D-2-a
Training status: Personnel listed on the protocol are due for required safety training
Approved = 17
Opposed = 0
Abstained = 0

The protocol was presented and approved with the completion of required safety training and clarification of the use of each location.

IBC-25-080 – Dr. Jacqueline Hecht - “Functional and regulatory studies of Cartilage Oligomeric Matrix protein (COMP)” AND “Pseudoachondro-plasia Cellular Phenotype Development and Modification” AND “Consequences of mutant COMP expression and therapeutic approaches in transgenic mice”

Containment Level: BSL-1, ABSL-1
NIH Section: III-E-3
Training status: Personnel listed on the protocol are due for required safety training
Approved = 17
Opposed = 0
Abstained = 0

The protocol was presented and approved with the completion of required safety training; no additional recommendations.

IBC-25-084 – Dr. Blake Hanson – “Culture and Nucleic Acid Extraction for Isolate-Based and Metagenomic Microbial Sequencing from Clinical Samples”

Containment Level: BSL-2; no animal work
NIH Section: Not applicable
Training status: Personnel listed on the protocol are due for required safety training
Approved = 17
Opposed = 0
Abstained = 0

The protocol was presented and approved with the completion of required safety training and the recommendation to rephrase the virus controls as “synthesized by Twist Bioscience” on the bioagents table.

IBC-25-089 – Dr. Michelle Rivera-Davila – “UTHealth Turner Syndrome Research Registry”

Containment Level: BSL-2; no animal work
NIH Section: Not applicable
Training status: all personnel listed on the protocol are current on safety training requirements
Approved = 17
Opposed = 0
Abstained = 0

The protocol was presented and approved pending clarification that they are receiving iPS cells. The protocol should be tabled if they are generating iPS cells in their lab from patient blood and the rDNA table should be completed. Also pending BSC certification (completed on 9/15/2025).

IBC-25-093 – Dr. Zhiqiang An – "Cancer drug resistance mechanisms in the HER/ErbB signalling pathways and Proteolytic cleavage of antibodies and its applications in designer cancer therapeutics" AND "ErbB signalling pathways" AND "Discovery and Characterization of Novel Anti-endotrophin Monoclonal Antibodies as Drug Leads for Cancer Therapy" AND "Counteracting Tumor Evasion of Antibody Immunity by a Novel Therapeutic Strategy" AND "New Antibody Therapy for Treating Leukemia" AND "Therapeutic Monoclonal Antibody Lead Optimization and Development Core (CPRIT Core Grant RP150551)" AND "Validation of LILIRB family of receptors and cancer targets and development of LILIRB targeting antibodies for cancer treatment" AND "Development of Hemichannel-Targeting Antibody Therapies for Breast Cancer Bone Metastasis" AND "Advanced Cancer Antibody Drug Modalities Core Facilities" AND "ITIM-receptors for cancer treatment" AND "Antibodies targeting S2 domain of the SARS-CoV-2 spike protein" AND "Epstein-Barr virus (EBV) specific monoclonal antibodies from memory B cells of naturally infected individuals, to support EBV vaccine development" AND "Development of potent multivalent pan-influenza neutralizing antibodies" AND "Targeting immunosuppressive myeloid cells in tumor microenvironment" AND "Reprogramming myeloid cells to inhibit cancer development" AND "Generation and characterization of Hantavirus-specific and Henipavirus-specific antibodies from naive human ScFv phage-display library." AND "Study TREM2 iso2 knockin only iPS induced microglia in Alzheimer's disease." And "Study long-term effect of TREM2-219 (iso2) in 5xFAD mice via AAV" and "mouse cancer parental and stable cell lines for antibodies evaluation on tumor growth"

The protocol was not presented at this IBC meeting due to further clarifications needed of the work by the Biological Safety Program.

IBC-26-001 – Dr. Yuying Liu – "The mouse model of infection with citrobacter rodentium"

Containment Level: BSL-2; ABSL-2 (all work will be done in an isolated facility outside of the vivarium)
NIH Section: Not applicable
Training status: all personnel listed on the protocol are current on safety training requirements
Approved = 17
Opposed = 0
Abstained = 0

The protocol was presented and approved pending BSC certification prior to initiation of work (verified by Biological Safety Program).

IBC-26-003 – Dr. Peter Yang – "Creation of Patient-Specific Induced Pluripotent Stem Cells"

Containment Level: BSL-2; no animal work
NIH Section: III-D-1-a
Training status: all personnel listed on the protocol are current on safety training requirements
Approved = 17
Opposed = 0
Abstained = 0

The protocol was presented and approved pending clarification on source of plasmids and more details on the plasmid system being used for differentiating into iPSCs.

IBC-26-004 – Dr. Karan Kaval – "Elucidating the role of host-derived bile salts on the regulation, expression and assembly of virulence factors in Listeria monocytogenes"

Containment Level: BSL-1; no animal work
NIH Section: III-D-1-a, III-D-2-a
Training status: all personnel listed on the protocol are current on safety training requirements
Approved = 0
Opposed = 17
Abstained = 0

The protocol was presented and tabled over concerns that the mutations could generate a more virulent organism. The committee would like more information on the genes of interest and the expected outcomes of these mutations.

7. **Conditionally Exempt Protocol Reviews**

IBC-25-087 – Dr. Peter Yang – "Immune Cell Niches in Neuroinflammation and Aging"

IBC-25-090 – Dr. Miguel Escobar – "Multiple Research Titles Involving the Use of Human and Recombinant Blood Products"

IBC-25-091 – Dr. Eric Boerwinkle – "Biospecimen Processing, Storage and Multi-omics Assays"

8. **Protocol Updates**
   a. **Significant updates:**

None

   b. **Administrative updates:**

IBC-21-055 – Dr. Vihang Narkar – "Transcriptional regulation in skeletal muscle physiology and patho-physiology" AND "Regulation of angiogenesis by nuclear receptors and co-activators." AND "Estrogen Related Receptor Gamma Signaling in Diabetic Muscle Angiopathy" AND "Regulation of angiogenesis by endothelial ERR-alpha signaling" AND "New Therapeutic Strategies for Peripheral Artery Disease"

- **Addition of work:** Adding work related to LLC, C-26, and KPC cells. The lab will use these cells used to induce tumors in mice.
- **Addition of bioagent:** Animal cells (LLC, C-26, KPC)
- **Addition of animal strain:** Mice (Balb/c)
- **Addition of personnel:** Anna DeBruine, Ya Xiang Huang, Svitlana Poliakova, Hao Nguyen

IBC-21-062 – Dr. Fudong Liu – "Immune responses after cerebral ischemia"

- **Addition of work with rDNA and new bioagent:** Lentiviral vector (pLenti-GIII expressing Usp9X) premade into mice; BSL-2 enhanced practices for Lentiviral vector with potential oncogene and ABSL-2 for the duration of the mouse experiments, III-D-1-a

IBC-22-004 – Dr. Kangho Kim – "Metabolic Benefits of Hepatic Bile Acid Signaling"

- **Addition of work:** Added the use of AAV8-Cyp2c29-OE (overexpression) and AAV8-Cyp2c29-KD (knockdown) in the second project to restore or inhibit CYP2C function specifically in the liver. AAV will be delivered via tail vein to mice, BSL-1, ABSL-1, III-D-4-a (new work does not increase containment or NIH guidelines)
- **Addition of rDNA and bioagent:** AAV8-Cyp2c29-OE and AAV8-Cyp2c29-KD
- **Addition of personnel:** Dr. Matthew DeBerge
- **Removal of personnel**: Inyoung Cheon
- **Addition of AWC:** AWC-23-0073 (DeBerge) See Experiment 22

IBC-22-018 – Dr. Laura Goetzl – "CNS-Derived Fetal Extracellular Vesicles for the Non-Invasive Diagnosis of Fetal CNS CMV Infection"

- **Addition of personnel:** Menna Elsaka

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 Bioagent:** murine glioma cell line (CT-2A)

IBC-23-042 – Dr. Laura Goetzl – "Biomarkers of Fetal Hypoxic Neuronal Injury"

- **Addition of personnel:** Menna Elsaka

IBC-23-049 – Dr. Anna Konovalova – "Biogenesis and maintenance of bacterial cell surfaces" AND "Mechanism of signal transduction across the bacterial cell envelope" AND "Biogenesis of Surface-exposed Lipoproteins in Gram-negative Bacteria" AND "Biogenesis of the gram-negative bacterial cell envelope"

- **Removal of personnel:** Susana Rodriguez Rojas Vertiz, Ha Do
- **Addition of personnel:** Martynas Basevicius

IBC-24-025 – Dr. Catherine Denicourt – "Mechanisms of aberrant ribosomal RNA (rRNA) methylation and altered mRNA translation in cancer" AND "**Investigating how RNA modifications regulate adaptive mRNA translation"**

- **Addition of bolded title**

IBC-24-053 – Dr. Hongyuan Yang – "AGPAT2 in whole body metabolism and the interactions between AGPAT2 and GPAT3/4 in vivo" AND **"The synthesis and trafficking of phosphatidylserine in cellular cholesterol homeostasis."**

- **Addition of bolded title**

IBC-24-064 – Dr. Myers Alan – "The Busulfan Metabolite (EdAG) and Areca Nut Alkaloids: Metabolism in Biological Species, Cytotoxicity to Human Liver, and Inactivation of Thiol Modifying Enzymes, and Drug Interactions."

- **Addition of work**: Objective #5 to request the use of additional human cell lines (brain) for in vitro experiments.
- **Addition of bioagents**: Human brain microvascular endothelial cells, Human brain vascular pericytes, Human brain astrocytes
- **Addition of location:** BBSB 4108E (shared tissue culture)

IBC-25-025 – Dr. Xiaoyang Hua – "The nose lung cross talk in Upper respiratory Virus infection (URVI) induces Asthma Exacerbations"

- **Addition of animal strains:** B6.129P2(Cg)-Cx3cr1tm1Litt/J

IBC-25-053 – Dr. Laura Goetzl – "Neuroinflammation in response to ascending reproductive tract ureaplasma infection"

- **Addition of personnel:** Menna Elsaka

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

- **Addition of bioagent:** Human cells (Human embryonic stem cells: WA01, WA09)
- **Addition of work:** Work related to using commercial human stem cells to generate brain organoids.

IBC-25-082 – Dr. Laura Goetzl – "Confirmation of Depression Medication Response Biomarkers"

- **Addition of personnel:** Menna Elsaka

## 9. BSL-3 Update

There are no updates regarding BSL-3 activities.

## 10. Biological Safety Program Activity Report

The Biological Safety Program Activity Report was provided for the committee to review. In August, we responded to a blood spill with an uncapped needle in the breezeway of MSB / Memorial Hermann. 1 reported mouse bite from a CLAMC worker during cage change and 1 rat scratch (no infectious material or rDNA involved). We trained 2 new personnel for Eltzschig's BSL2+ laboratories.

## 11. Environmental Protection Program Activity Report

The Environmental Protection Program Activity Report was provided for the committee to review.

## 12. Other Items

The Biological Safety Program is requesting feedback on the protocol review process of the new online IBC protocol submission site. An additional email will be sent to all members with access to our system.

## 13. Next Meeting

The meeting is scheduled for October 9, 2025, via Microsoft Teams from 3:00 PM to 4:00 PM.

## 14. Adjournment

The meeting was adjourned by Dr. Denicourt at 4:07 PM.