TEXAS A&M UNIVERSITY
INSTITUTIONAL BIOSAFETY COMMITTEE - KINGSVILLE
MEETING MINUTES

***DATE**: 08/27/2025*
***TIME**: 12:35PM*
***LOCATION**: Zoom*

The meeting for the Texas A&M University (TAMU) Institutional Biosafety Committee (IBC) - Kingsville was called to order by the Chair at 12:35 PM. This meeting was open to the public.

MEETING ATTENDANCE

Voting members present – 13
Voting members required for quorum – 8

Voting IBC Members Present

☒ Carlos Gonzalez, IBC Chair
☒ Kurt Zuelke, IBC Vice Chair
☒ Jessica Bourquin, BSO
☒ Lisa Auckland
☒ Noah Cohen
☐ Jason Gill
☒ Tennille Lamon
☒ Kevin Myles
☒ Sanjay Reddy
☒ Penny Riggs
☒ Christina Robertson
☒ Joseph Sorg
☒ Juan J. Adame, Community Member
☒ Mary Mantle, Community Member

Office of Biosafety (OBS) Staff Present:

☒ Merissa Bruns
☒ Cat Carey
☒ Athena Cherry
☒ Susan Gater
☒ Melissa Hinga
☒ Jeffrey Lane
☒ Jeni Mathews
☒ Ruchira Mitra
☒ Grant Severson
☒ Megan Shoff
☒ Beatriz A Velez
☒ Jennifer Wier
☒ Todd Wisner
☒ Wendy Wright
☒ David Perez

Guests Present:
Principal Investigator (PI) Huang
8 additional guests

I. ANNOUNCEMENTS

A. IBC CHAIR

i. None

B. BIOSAFETY OFFICER

i. Welcome for new community member, Chief Juan Adame
ii. IBC Retreat Reminder – September 24, 2025, at the Hildebrand Equine Center in College Station

II. OLD BUSINESS

A. None

III. NEW BUSINESS

A. None

IV. REPORTS

A. Institutional Biosafety Program (IBSP):

The IBSP report was presented for committee review. Since the previous meeting for the TAMU IBC - Kingsville on 08/24/2022:

- 105 submissions were received by the Office of Biosafety for review by the IBC and
- 106 submissions were reviewed and processed by Biosafety Program Staff and approved by the IBC Chair on behalf of the IBC, including:
  - 0 terminations and
  - 2 extensions.

These submissions could include any of the following: a simple amendment (room change, personnel, etc.), an initial or 3-year renewal application describing non-recombinant or exempt recombinant studies, administrative actions (including terminations and extensions), and annual reviews. Committee members are encouraged to review these submissions (not requiring full committee review) in iRIS.

B. Incident Reports

None

V. PROTOCOL REVIEWS

A. The committee reviewed the proposed research, including agent characteristics, experimental manipulations, recombinant or synthetic nucleic acid components, and the training and qualifications of the PI and lab personnel. Final approval is contingent upon confirmation by the IBC Chair or the Office of Biosafety, on behalf of the IBC, that all personnel have completed the required training, facilities meet containment standards, and all necessary modifications have been addressed. Any unresolved issues or significant changes will be brought before the full committee for further review.

B. The IBC Chair reminded all members present to identify any conflicts of interest prior to IBC registrations being reviewed.

Protocol #	IBC2025-057
Protocol Type	Initial
PI Name	Ke Huang
Reviewer Summary	Dr. Huang submitted an initial application to work with lentiviral vectors (LVV), human stem cells, and engineered extracellular vesicles in order to study cardiac tissue regeneration following ischemia/reperfusion injury. The research involves recombinant DNA manipulations, lentiviral vector production, and administration of genetically modified nanovesicles to animal models.
Section(s) of *NIH Guidelines*	III-D-3, III-D-4, III-F

<table>
<tr><td>Characteristics of Agent(s) or Material(s)</td><td>
<table>
<tr><th>#</th><th>Agent</th><th>BSL</th><th>In vivo</th><th>Recombinant</th></tr>
<tr><td>1</td><td>LVV</td><td>BSL-2</td><td>No</td><td>Yes</td></tr>
<tr><td>2</td><td>Human cell lines</td><td>BSL-2</td><td>No</td><td>Yes</td></tr>
<tr><td>3</td><td>E. coli K-12 strains</td><td>BSL-1</td><td>No</td><td>Yes</td></tr>
<tr><td>4</td><td>Exosomes from transduced cells</td><td>BSL-2</td><td>Yes</td><td>Yes</td></tr>
<tr><td>5</td><td>Nanovesicles from transduced cells</td><td>BSL-2</td><td>Yes</td><td>Yes</td></tr>
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</td></tr>
<tr><td>Recombinant Modifications</td><td>
<table>
<tr><th>Agent #</th><th>Category/Description</th><th>Source RG</th></tr>
<tr><td>1-5</td><td>Fluorescent and colorimetric markers</td><td>1</td></tr>
<tr><td>1-5</td><td>Angiogenic genes (e.g., VEGF, JUP)</td><td>1</td></tr>
<tr><td>1-5</td><td>Regulatory RNAs (e.g., miR21)</td><td>1</td></tr>
</table>
</td></tr>
<tr><td>Viral Vectors</td><td>LVV, 3rd generation, replication incompetent</td></tr>
<tr><td>Risk Assessment, Mitigations, and Work Practices</td><td>

Recombinant and biohazardous work is performed under BSL-2 conditions within certified BSCs.
LVV pseudotyped with VSV provides broad tropism and could increase the risk of unintended transduction and aerosol risk during centrifugation or handling.

LVVs are replication-incompetent, self-inactivating, and are produced using split plasmid systems to minimize replication competent virus risk.

Exosomes and nanovesicles derived from transduced cells are administered to animals under ABSL-2 containment.
VEGFA (Vascular Endothelial Growth Factor A): Promotes angiogenesis and vascular permeability. Overexpression can contribute to tumor growth and neovascularization. Accidental exposure could theoretically lead to localized angiogenic effects.
JUP (Plakoglobin): Cell adhesion and signaling; implicated in cardiac and cancer biology. Dysregulation may affect cell proliferation or adhesion.
miR-21 (microRNA-21): Regulatory RNA involved in cell proliferation, apoptosis, and fibrosis. miR-21 is upregulated in many cancers and may suppress tumor suppressor genes.
Mitigations for oncogenes and potential oncogenes:

All manipulations performed in BSL-2 cabinets.
Sharps precautions and PPE enforced.
Personnel trained on oncogene risks.

IACUC approval will be obtained prior to the start of in vivo work.

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<tr><td>Training and Expertise of Research Personnel</td><td>Dr. Huang has over 9 years of experience with BSL-2 and ABSL-2 research involving recombinant DNA, lentiviral vectors, and animal models. He has completed all required biosafety and bloodborne pathogen training and provides hands-on training to all lab personnel. SOPs are in place for lentiviral production, exosome processing, and animal procedures.</td></tr>
<tr><td>Biosafety Occupational Health</td><td>BOHP Annual Enrollment
Bloodborne Pathogen annual training</td></tr>
<tr><td>Motion</td><td>Motion to approve and seconded</td></tr>
<tr><td colspan="2">13 For 0 Against 0 Abstain 0 Recuse</td></tr>
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VI. MAJOR MOTIONS OR POINTS OF ORDER

None

VII. MEETING ADJOURMENT

The IBC meeting was adjourned at 12:48 PM.