INSTITUTIONAL BIOSAFETY COMMITTEE

DRAFT MEETING MINUTES

The University of Texas at San Antonio
Wednesday September 4th, 2024
Microsoft Teams Meeting

Minutes Prepared by: Mohammad Siddiqur Rahman Khan

MEMBERS PRESENT (need 7 for quorum)

☒Dr. Jose Lopez-Ribot, Chair, Voting

☒Dr. Janakiram Seshu, Vice-Chair, Voting

☒Mr. Mohammad Rahman Khan *ex officio*, Biosafety Officer, Laboratory Safety

☒Dr. JiehJuen Yu, Voting

☒Dr. Karl Klose, Voting

☒Dr. Marcel Perret-Gentil, Voting

☒Dr. Jurgen Engelberth, Voting, Plant Specialist

☒Dr. Astrid Cardona, Voting

☐Mr. Rich Garza, Hazardous Waste Manager with vote

☒Ms. Yolanda Acosta, *ex officio* Scientific Alternate with vote

☐Dr. Ana Vallor, Non-Affiliated, Voting

☐Dr. Shannan Hall-Ursone, Non-Affiliated, Voting

☐Dr. Soo Chan Lee, Voting (Scientific Alternate)

☐Mr. Anthony Vallejo, *ex officio*, Director of Laboratory Safety, (Scientific Alternate)

GUESTS

☒Mrs. Rachel Davis, UTSA Scholarly Resources Librarian

☐Ms. Jolyn Demarest, Occupational Health Program non-voting

☐ Dr. Hamid Badali, Voting, (Scientific Alternate)

☒Ms. Kimberly Moore, Laboratory Safety Specialist, (non-voting)

START: 09:02 am **09 voting members present**

ADJOURN: 09:29 am

I. REVIEW OF THE MINUTES OF THE PREVIOUS MEETING

Minutes of Meeting held on August 7th, 2024
Score 1: Approved
Committee Decision: 09 in favor, **0** opposed, and **0** abstention

II. REVIEW OF APPLICATIONS

In reviewing each protocol discussed below, the committee gave consideration to the following specific concerns, as appropriate:

a. Adequacy of containment equipment / procedures / facilities to be implemented
b. Agent characteristics (e.g., virulence, pathogenicity, environmental stability)
c. Types of manipulations planned
d. Source(s) of the inserted DNA sequences (e.g., species)
e. Nature of the inserted DNA sequences (e.g., structural gene, oncogene)
f. Host(s) and vector(s) to be used
g. Whether or not an attempt will be made to obtain expression of a foreign gene, and if so, the protein that will be produced.

IBC# 109: STUDIES OF HUMAN TISSUE FUNCTION IN HEALTH AND DISEASE USING INDUCED-PLURIPOTENT STEM CELLS AND MOUSE ADULT NEUROGENESIS.

For the IRB/human studies, the purpose of this study is to produce induced pluripotent stem cells (iPSCs) from the tissue (blood, skin biopsies, or dental pulp) of patients and healthy people. Biospecimens will be collected from human subjects and processed in the lab at UTSA. Biospecimens and processed cells will be stored at UTSA for current and future research studies, or the processed cells will be sent to collaborating researchers. We will use tetrodotoxin to block voltage-gated sodium channels in (1) acute brain slices maintained and (2) in vitro brain organoids generated from embryonic stem cells and inductively pluripotent stem cells. For the IACUC/animal studies, the purpose of this study is to understand the cause and mechanisms of epilepsy so we can develop better treatments. Epilepsy is a neurological disorder characterized by abnormal nerve cell activity causing individuals to experience various degrees of seizure symptoms. We are using mouse as a model organism because it is a mammalian species and there are many genetic tools and strains available to evaluate their brain function and electrical signaling.
Microbial Agents, Infectious Agents or Toxins
Biosafety Level
BSL 2
Risk Group
2
Section of the NIH Guidelines (if applicable)
F-Appendix C-VII

F-Appendix C-VIII
Section III-D-3
Section III-D-4
Section III-D-4-a
Section III-D-4-b
Section III-D-4-c-(2)
Section III-E-1
Section III-E-3

Score: 1-Approved
Committee Decision: **09** in favor, **0** opposed, and **0** abstention

IBC# 112: INTERACTION OF BIOMATERIALS WITH MAMMALIAN CELLS

The objective of this protocol is to culture the following mammalian cells: HEK293, C2C12, U87MG, HUVEC, C8-D1A, ND7/23, and primary rat neurons. The cells will be cultured to study their interaction with magnetic and polymer-based materials fabricated in the laboratory. HEK293, U87MG, HUVEC and C8-D1A cells will be exposed to polyamino acid particles that carry plasmid DNA, and we will study non-viral transfection efficiency. C2C12 and ND7/23 cells are used to study cell growth and differentiation due stimulation by magnetic to poly electroconductive nanoparticles. Primary rat neurons are isolated from newborn Sprague Dawley rats (IACUC protocol MU-RA007) and cultured for about 3 weeks. Primary rat neurons will be used to explore neural pathways by using magnetic nanoparticles.
Microbial Agents, Infectious Agents or Toxins
Pertussis toxin
Biosafety Level
BSL 2
Risk Group
1
Section of the NIH Guidelines (if applicable)
Section III-D-4 Section III-F-1 Section III-F-6 Section III-F-7 Section III-F-8

Score: 2- FCR. PI responded back and Scored 1 and approved
Committee Decision: **09** in favor, **0** opposed, and **0** abstention

---

III. REVIEW OF AMENDMENTS

S/N	Lab Name	PI	Amendments for	Reviewer comments	Decision

IV. ADMINISTRATIVE APPROVAL

S/N	Lab Name	PI	Amendments for	Reviewer comments	Decision
1	[redacted]	[redacted]	IBC# 105: Oxidative stress responses related to neurodegeneration	No rDNA research	Admin Approved

			(RENEWAL)		
2	[redacted]	[redacted]	IBC# 107: Study on Bone Fragility Fractures (RENEWAL)	No rDNA research	Admin Approved
3	[redacted]	[redacted]	IBC# 13: EEG studies (NEW PROTOCOL)	No rDNA research	Admin Approved
4	[redacted]	[redacted]	IBC#113: HONEY Pathway (New protocol)	No rDNA research	Admin Approved
5	[redacted]	[redacted]	IBC# 103: Magnetic Cellulose Bioconjugates for L. monocytogenes Disinfection (NEW PROTOCOL)	No rDNA research	Admin Approved
6	[redacted]	[redacted]	IBC#34: [redacted] general assays IBC# 98: [redacted]	Added cell lines. No rDNA research	Admin Approved
7	[redacted]	[redacted]	IBC# 115: Behavioral Biology of Zoo Animals and Wildlife [redacted] (Students will learn methodological techniques and conduct original research in the fields of bioacoustics and animal behavior, with additional focus on the application of bioinformatics approaches such as machine learning to these fields.)	New protocol. No rDNA research	Admin Approved
8	[redacted]	[redacted]	IBC# 101: Biomechanics of Human Cadaveric Tissue (The purpose of these studies is to address the mechanical and biomechanical factors influencing hard and soft tissue integrity and performance, as well as non-invasive tissue assessment and modeling using medical imaging.)	Renewal. No rDNA research	Admin Approved

V. EXPIRED / CLOSED PROTOCOLS

None at this time

VI. NEW BUSINESS

A. UTSA Biosafety Plan 2024-APPROVED

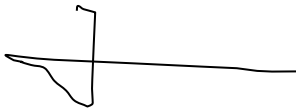
B. [redacted]

C. Update from BSO.

- Polio virus survey
- USG policy for oversight of DURC and PEPP
- BSL3 shutdown

VII. ADJOURN

The meeting was adjourned at 09:35 AM. Next month's meeting will take place on Wednesday, September 4th 2024 at 9.00 AM via Teams.



Jose Lopez-Ribot, IBC Chair