The University of Texas at El Paso IBC (Recombinant DNA)

MEETING MINUTES

June 20, 2025

Microsoft Teams

ATTENDANCE

Voting Members Present:

1. S. Das, Chair
2. B. Arriaga, BSO
3. J. Dupre, Non-Affiliate
4. G. Ibarra-Mejia, Scientist
5. M. Llano, Scientist
6. M. Narayan, Scientist
7. T. Moschak, Scientist

Members not in Attendance:

1. C. Vines, Scientist
2. S. Kuri, Non-Affiliate
3. E. Weich, Attending Vet
4. E. Joseph, Alt Animal Expert

Recording/Visitors:

1. A. Blanco, R&I Staff
2. J. Cervantes, R&I Staff
3. M. Lopez, PAVE Staff
4. L. Moctezuma, EH&S Staff

ITEMS

1. **(A) Welcome and Opening Remarks**

   The IBC Chair called the meeting to order at 9:06 AM. A quorum was met with 7 of 10 voting members present.

2. **(B) Review of Previous Minutes**

   The IBC Committee reviewed the meeting minutes from March 21, 2025, and May 23, 2025. Minor corrections were noted and incorporated. A motion to approve the corrected minutes from both meetings was made and seconded; 7 in favor, 0 opposed, and 0 abstentions.

3. **(C) New Protocols:** (for below-listed protocols, pending deliberation on a new protocol or a de novo triennial protocol renewal submission; for triennial renewal submissions, the review includes deliberation on a final report for the previous three-year approval period):

   3.1 IBC; Derivation of primary cultures from mammalian tumors
   Reference Number: 355619-12
   Principal Investigator: Giulio Francia
   Submission Type: New Protocol
   Review Type: Full Committee Review
   Action: Approve With Contingencies

Discussion:
The IBC Chair provided a summary of the project to the committee. This project focuses on developing new cancer therapies by generating primary cultures from human and animal tumor tissues and using advanced molecular tools. The lab will collect discarded tumor samples for research, express the sVEGFR2 protein using a baculovirus system to target tumor angiogenesis, and test anti-VEGFR2 antibodies. Additionally, the PI will use patient-derived xenografts and apply CRISPR-Cas9 gene editing on breast cancer cell lines to study and manipulate cancer-related genes, aiming to improve treatment strategies. The project was previously reviewed during the March 21, 2025 IBC meeting, in which there were modifications requested by the IBC committee. The IBC committee focused on the latest revisions submitted by the PI. The IBC Committee engaged in a discussion regarding the protocol submission, focusing particularly on the accuracy and consistency of checkbox responses and associated descriptions in the application. Several areas were identified where clarification and modifications were necessary prior to final approval. For Aim 1 of the protocol, the Committee requested that the language be revised to state, “we will ensure the use of proper PPE,” to more clearly reflect the lab’s safety practices. A key point of discussion involved question 2.1a, which pertains to the use of recombinant DNA. Both the BSO and a committee member raised concerns about whether recombinant DNA is being used in animals, which was not clearly indicated. The Committee determined that if the PI confirms “yes” to question 2.1a in the application form, the protocol could be processed via Designated Member Review (DMR) as it would be exempt under the NIH Guidelines. However, if the answer is “no,” the protocol must be returned to the full board for further review. Another committee member stated that regardless of the determination, the overall risk was mitigated by the PI. Additionally, clarification was requested on question 2.12, as it was changed to “no” in the revised submission. The Committee found this contradictory, as the protocol still involves recombinant DNA, and therefore the answer should remain “yes.” The PI must clarify why this change was made and correct the response. The Committee also requested that procedures involving animals be clearly described in the protocol, and that the location provided in Appendix B be clarified for consistency and accuracy. Following this discussion, a motion was made and seconded to approve the protocol with contingencies. These contingencies include correcting the responses to questions 2.1a and 2.12. If the PI confirms “yes” to question 2.1a, the protocol can be approved via DMR. If the PI responds “no,” the protocol will be returned to the full board for further review. The motion passed with 7 in favor, 0 opposed, and 0 abstentions.

3.2 IBC: Molecular Composition and Function of Trypanosoma cruzi Vesicles
Reference Number: 908067-6
Principal Investigator: Igor Almeida
Submission Type: New Protocol
Review Type: Full Committee Review
Action: Approve

Discussion:
The IBC Chair provided a summary of the project to the committee. This project is focused on characterizing extracellular vesicles (EVs) secreted by Trypanosoma cruzi (TCT-EVs) to identify potential biomarkers for early diagnosis and treatment monitoring in Chagas disease. The project will involve purification of EVs from parasite cultures and patient samples, molecular profiling using RNA-Seq and proteomics, evaluation of immune reactivity, and assessment of their role in infection and potential as vaccine/immunotherapy candidates. Recombinant DNA and T. cruzi work will be conducted under BSL-2 containment. The project

was previously reviewed by the IBC committee during the May 23, 2025 meeting, in which the submission was tabled due to the PI submission of revised documents the day before the meeting which did not allow for adequate IBC review. The IBC Committee reviewed the revisions submitted by the PI in response to the comments made by the IBC reviewers. The Committee was satisfied with the revisions and the inclusion of Appendix A. A motion to approve the protocol was made and seconded, with 7 in favor, 0 opposed, and 0 abstentions.

3.3 The Pathobiology of Bacterial Infections
Reference Number: 2312975-1
eProtocol ID: 25-06-102
Principal Investigator: Charles Spencer
Submission Type: New Protocol
Review Type: Full Committee Review
Action: Approve

Discussion
The IBC Chair provided a summary of the project to the committee. This project aims to explore the biology of natural killer T (NKT) cells and focus on understanding how necroptosis contributes to disease caused by *Francisella tularensis*. The study will also examine how infection with *F. tularensis* impacts brain cells and behavior in animal models. Additional experiments will investigate immune responses in macrophages and brain-resident microglia, including possible differences based on sex. The project was previously reviewed by the IBC committee during the May 23, 2025 meeting, in which modifications were requested by the IBC committee. Dr. Spencer's protocol, originally was submitted on IRBNet but revised and resubmitted through the eProtocol system as part of the transition process. During the initial review, the Committee identified various issues, including unanswered items such as Question 1.6. The BSO and the IBC reviewer had provided specific comments and requested clarifications, which the PI addressed in the revised version. Among the concerns raised, the PI needed to provide more detail regarding the facilities to be used, specifically including the flow cytometer information, and to describe the grinding process due to its potential to generate aerosols. During the follow-up review, the Committee requested that a contingency and mitigation risk plan be added for the use of the flow cytometer, especially those using Jet-in-Air fluidics, due to their potential for aerosol generation. Additionally, under Question 1.2 (Facilities), the PI was asked to remove "none" and instead list all equipment and the associated risk mitigation strategies. It was noted that the PI had removed the use of AAV vectors and diphtheria toxin from the original protocol form and had otherwise mitigated the risks associated with the work. The BSO confirmed that the project now presents a low risk. A motion to approve the protocol was made and seconded, with 7 in favor, 0 opposed, and 0 abstentions. Protocol will be processed in the eProtocol submission platform, IRBNet submission will be acknowledged.

4. (D) Procedural Amendments: (for the below-listed protocol(s), deliberation on a proposed change in procedures or location for a protocol that currently has a three-year approval period):

4.1 IBC BSL3_Understanding pathogenesis and virulence mechanisms of Mycobacterium tuberculosis for Drug development and potential vaccine candidates
Reference Number: 2084889-6

Principal Investigator: Sangeeta Tiwari
Submission Type: Procedural Amendment
Review Type: Full Committee Review
Action: Approve

Discussion:
The IBC Chair provided a summary of the procedural amendment. The PI is proposing to add the use of CRISPR interference (CRISPRi) to suppress the expression of *Mycobacterium tuberculosis* (Mtb) genes involved in secretion system effectors related to pathogenesis. This includes the use of plasmids such as pIRL58, pIRL19, pTEC18, pTEC27, pMV306hsp+LuxG13, and pST-KiT, as well as expression vectors containing fluorescent and luminescent tags including GFP, Venus, BFP, RFP, TdTomato, mCherry, Luciferase, and NanoLuciferase. The amendment was reviewed by the IBC committee on May 23, 2025 in which due to a loss of quorum, the IBC committee was unable to complete the discussion or vote on the amendment. As a result, the amendment was tabled. The IBC Committee reviewed the procedural amendment submitted by Dr. Tiwari. The PI is adding a new vector system to the protocol for confirming antibiotic resistance, utilizing reporter constructs. Additionally, the protocol now includes the use of CRISPR interference (CRISPRi), with materials being purchased from a commercial vendor. The PI clarified the use of the CRISPRi system and removed references to the Orbit system, confirming that this change reflects a correction rather than an addition. These changes do not alter the biosafety level or the overall risk of the study. The Committee was satisfied with the revisions made by the PI and had no further concerns. A motion to approve the procedural amendment was made and seconded, with 7 in favor, 0 opposed, and 0 abstentions.

5. (E) Personnel: (for the below-listed protocol(s), announcement that new individuals have been administratively processed to work on a protocol based on completion of training):

5.1 IBC; Derivation of primary cultures from mammalian tumors
Reference Number: 355619-12
Principal Investigator: Giulio Francia
Submission Type: Personnel (Addition)
Review Type: Administrative
Action: Acknowledge

Discussion:
Training was verified for all added personnel. The personnel amendment letter is pending full protocol approval by the IBC.

5.2 IBC: Molecular Composition and Function of Trypanosoma cruzi Vesicles
Reference Number: 908067-6
Principal Investigator: Igor Almeida
Submission Type: Personnel (Addition/Removal)
Review Type: Administrative
Action: Acknowledge

Discussion:

Eleven individuals were added to the protocol, and five individuals were removed. Training was verified for all added personnel. A personnel amendment letter was created and published to reflect these changes.

5.3 The Pathobiology of Bacterial Infections
Reference Number: 2312975-1
eProtocol ID: 25-06-102
Principal Investigator: Charles Spencer
Submission Type: Personnel (Addition)
Review Type: Administrative
Action: Acknowledge

Discussion:
Training was verified for all added personnel. Protocol personnel was processed in eProtocol submission platform.

6. (F) Discussion and Approval Action regarding the following matters:

A. Biosafety Officer brief to IBC on Lab Safety Inspections, Lab Construction/ Modifications, spills/incidents

I. Radiation Safety Officer (RSO) Status:
   i. UTEP's RSO position is currently vacant as of May.
   ii. Emilio Rodriguez (AVP of EH&S) has contacted the state to serve as interim RSO.
   iii. All new applications involving radiation or laser equipment are currently suspended. Previously approved and licensed radiation safety protocols are not affected.
   iv. BSO is planning to undergo training to serve as backup RSO.

II. Lab Safety Oversight: With the departure of the RSO, campus-wide lab safety oversight is now under the BSO's responsibility.

III. [redacted]
   i. [redacted]
   ii. [redacted]

B. General Announcements

I. Next IBC meeting scheduled for July 18 at 9:00am

7. Adjournment

The meeting was adjourned at 10:44 AM.