QU IBC MEETING AGENDA/MINUTES
May 9, 2025, Zoom [ ]

Meeting Opened at 9:01AM

Individuals in attendance
Quorum = 5 voting members

- Shawna Reed (Chair, Voting)
- Karen Misbach (Internal Member, BSO, Voting)
  ~~William Nelligan (External Member, Voting)~~
- Justin McDonough (External Member, Voting)
  ~~Joe Watson (Internal Member, Voting)~~
- Tom Torello (Internal Member, Voting)
  Carter Takacs (Internal Member, Voting
- Nils Pilotte (Internal Member, Voting)
  ~~Maureen McCarthy (nonvoting)~~

- **Approval of prior minutes April 30 2025**
  - **MOTION To approve Tom Torello**
  - **Seconded by Carter Takacs**
  - **Minutes approved by unanimous vote 6/6**

Agenda
- Approval of last minutes (April 30 2025)
- Discussion on revised discussant form/guide and minutes format
- Discussion/Voting on Revised proposal
  - Discussant: Shawna Reed

Discussion of protocol (– MED - New protocol "Disruption of gene function in ")
- Review discussant form and revised protocol

- Principal Investigator (PI) name
  -

- Project title
  - **Disruption of gene function in**
- Training proposed / Required by QU IBC
  - CITI Training: Bloodborne Pathogens, rDNA
- Applicable section of the NIH Guidelines the research falls under (e.g. Section III-D-1, Section III-E-3, etc.)
  - III-F-8
- Containment conditions (biosafety level and any special provisions)
  - Exempt and BSL-1, RG1 organisms
  - Assessment – is this the appropriate biosafety level?
    - Yes, no viruses, parts of viruses, or pathogenic bacteria are being manipulated or used. No gene drive modified animals are being produced.
  - Assessment – is the location inspected/permitted for this use?
    - Yes, per IACUC approval the location is permitted
    - lab is also inspected and approved for BSL-2 work

Summary of the Project:

- Agent characteristics (e.g. virulence, pathogenicity, environmental stability)
  - Nonpathogenic, Exempt E. coli used to propagate and amplify DNA vectors and generate Cas protein encoding mRNAs
  - Injection of mRNA and synthetic guide RNA (gRNA) to generate RNA knockdown and DNA breaks and mutations in .
  - *Genes targeted are involved in embryonic neural tube development*
  - No exogenous rDNA would remain in the
- Types of manipulations planned, amount of culture used or generated
  - Small-scale culture of E. coli K 12 (less than 1 liter)
- Source(s) of the nucleic sequences (e.g., species)
  - Cas13d Ruminococcus flavefaciens XPD3002
  - Cas9 Streptococcus pyogenes
- Nature of the nucleic acid sequences (e.g., structural gene, oncogene)
  - CRISPR system genes
- Host(s) and vector(s) to be used
  - E. coli K12 (propagate plasmids)
  - (receive gRNA and mRNA)
- Expression of any transgenes, and if so, function of the protein
  - Cas9, Cas13d nucleases cut DNA or RNA
- Use of animals, plants or human subjects/samples:
  -
- Check for compliance with the NIH Guidelines:

- No use of human gene therapy, Dual Use Research of Concern, or Gain-of-function research
- *Use of animals, germline modification but no transgenes will be expressed in the animals*.

Change Summary (from last reviewed version)

- IACUC approval was verified by Shawna Reed (IBC Chair)
- Added a clearer and more detailed project description
- Added and clarified details about the proteins expressed and bacterial plasmid vectors used including plasmid maps
- Added details about off-target analysis for generated gRNAs
- Added safety controls and response plan
- Added decontamination and disposal plan

- Discussion:
  - Karen and Shawna discussed revisions made by Dr. [redacted]
  - [redacted] left meeting for the vote (he is recused [redacted])
- MOTION AND VOTE
  - Karen Misbach motions for a vote
  - Tom Torello seconds
  - 5/5 voting members voted to approve revised protocol
  - Designation 2025-[redacted]

- IBC meeting Adjourned 9:24AM