UMMS TRANSGENIC ANIMAL MODELING CORE (TAMC)

MOUSE ESC GENOME EDITING

THE FACILITY WILL PERFORM:

1. Transfection of DNA, RNA and/or protein into pluripotent embryonic stem (ES) cells derived from 129-strain mouse embryos (AB1), C57Bl/6-embryos (JM8), or a 129/Bl6 F1 hybrid (V6.5). The Core will co-transfect a transient drug selection marker if appropriate.

2. Growth of the transduced ES cells on an inactivated SNL76 (STO) feeder cell layer in the proper selection media.

3. Transfer of up to 400 of the surviving colonies into 96-well micro-titer dishes bearing feeder cells.

4. Passage of the clones onto gelatinized 96-well micro-titer dishes, and freezing down of duplicate dishes of the ES clones on feeder cells.

5. Preparation of genomic DNA in the micro-titer dishes for analysis performed by the Investigator (protocols available). Alternatively at the request of the Investigator, the ES clones will be expanded into six to eight 24-well plates, with frozen cell pellets given to the Investigator for subsequent DNA prep and analysis.

6. Following identification of putative positive clones, the TAMC will expand select clones for a larger-scale freeze down and DNA preparation, and will provide the DNA to the Investigator for further analysis.

7. Frozen vials of the properly targeted clones will be given to the Investigator. One vial of each line will be retained by the Core if the TAMC is to provide further services.

Charges = $3,500.00 per Electroporation

P.I. Name _____ *Date Received* _____

Department _____

Account Number _____

Project Name(s) _____ *TOTAL CHARGES $* _____

X _____ *X* _____

UMMS INVESTIGATOR / date *UMMS TAMC/* / date

revised: 7/1/2017