UMMS TRANSGENIC ANIMAL MODELING CORE (TAMC)
CRYOPRESERVATION OF MOUSE EMBRYOS

THE FACILITY WILL PERFORM:

1. Weekly mating of one or more male mice, supplied by investigator, with superovulated wild type female mice.
2. Vitrification (cryopreservation) of 90-120 total morula stage embryos.
3. Storage of cryopreserved embryos in liquid nitrogen.
4. Test for viability of cryopreserved embryos by culture to blastocyst stage.

Successful weekly mating of a Transgenic male with wild type females will result in the production of approximately 15-20 compacted morula stage embryos for cryopreservation, The Core uses a quick freeze method known as vitrification employing glycerol and propylene glycol as cryoprotectants. Embryos for cryopreservation are placed into 0.25 cc plastic straws (10-15 per straw), sealed with plastic identification rods, and rapidly immersed into liquid nitrogen for long-term storage. To verify successful cryopreservation, one straw is thawed after storage. After removal of cryoprotectants, embryos are cultured overnight and evaluated the next day for blastocyst stage development.
Once a cryopreservation experiment is underway, the minimum time for completion will be approximately eight weeks (seven weeks for cryopreservation and one week for evaluation). The cryopreserved embryos will then be stored by the Core Facility for an additional charge or transported to the investigator's laboratory.

Please note that the number of cryopreserved transgenic embryos will depend on the genotype of the male provided (i.e. 50%transgenics from a heterozygous male). The TAMC can only guarantee the total number or cryopreserved embryos (90-120) for investigators.

Charges for cryopreservation as described above = $2,000 per line

*P.I. Name*_____ *Date Received*_____
*Department*_____ *Mouse line(s)*_____
*Speedtype number*_____ *Background strain*_____
*IACUC Docket Number*_____
*IBC Docket Number*_____ *TOTAL CHARGES* $_____

X_____ X_____
UMMS INVESTIGATOR / date UMMS TAMC / date

revised: 7/1/2017