

# UMMS TRANSGENIC ANIMAL MODELING CORE (TAMC)

## MOUSE BLASTOCYST INJECTION

### THE FACILITY WILL PERFORM:

1. Microinjection of targeted embryonic stem (ES) cells into C57BL/6 mouse embryos.
2. Transfer of 25 injected embryos into pseudo-pregnant recipients.
3. Care of the resulting chimeric mice through pregnancy, birthing and weaning.

Transfer of 25 injected blastocysts into pseudo-pregnant recipients will typically result in the generation of approximately 3-5 chimeric mice. The use of non-differentiated ES cells typically results in the production of mice that are 20-100% chimeric by coat color. Those mice with greater than 50% chimerism typically transmit the ES cell genetic alleles to their offspring (i.e. "go germline").

Once a blastocyst injection experiment is underway, the minimum time for production of the founder chimeric mice will be about nine weeks (three weeks for injections, three for gestation and three weeks until weaning). Chimeric mice will be transferred to the Investigator. at that time, and the Investigator will have full responsibility for further breeding, genetic analysis, observation, etc.

Not all ES cells microinjected into mouse embryos will produce high-degree chimeric founder animals nor contribute to the germline of the resulting mouse. Therefore, the UMMS Transgenic Animal Modeling Core can only guarantee the number of injected embryos transferred into pseudo-pregnant recipients.

*If you are providing the targeted ES cells (i.e. the targeting was not performed by the TAMC), please attach the ES Cell information form. Note that these ES cells must meet all UMMS IACUC requirements and be approved for TAMC usage by the Core Director.*

***Charges for blastocyst injection services as described above = \$7,000 per ES cell line.***

P.I. Name \_\_\_\_\_  
Department \_\_\_\_\_  
Speedtype number \_\_\_\_\_  
IACUC Docket Number \_\_\_\_\_  
IBC Docket number \_\_\_\_\_

Date Received \_\_\_\_\_  
ES Clone name(s) \_\_\_\_\_  
Genetic background \_\_\_\_\_  
Coat color \_\_\_\_\_

TOTAL CHARGES \$ \_\_\_\_\_

X \_\_\_\_\_  
UMMS INVESTIGATOR / date

X \_\_\_\_\_  
UMMS TAMC / date