

# UMMS TRANSGENIC ANIMAL MODELING CORE (TAMC)

## MOUSE TRANSGENICS (PLASMID-BASED)

### THE FACILITY WILL PERFORM:

1. Microinjection into \_\_\_\_\_ (strain name) mouse embryos.
2. Reagents to be injected \_\_\_\_\_ (DNA/RNA/protein/BAC etc).
3. A minimum of ten transfers into pseudo-pregnant recipients.
4. Care of the mice though pregnancy, birthing and weaning.

Sufficient numbers of microinjected zygotes will be transferred into pseudo-pregnant recipients to yield approximately 35-40 births. Approximately 10-20% of the resulting mice will bear the transgene or nuclease modification. Although injection of larger DNA fragments may cause decreased numbers of births, the UMASS Transgenic Animal Modeling Core has generated mice from 98% of all DNA constructs attempted.

Once a microinjection experiment is underway, the minimum time for production of founder mice will be approximately ten weeks (four weeks for injections, three weeks for gestation, three weeks for weaning). The 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 DNA constructs microinjected into mouse embryos will produce transgenic founder animals, as the biologic effects of the expression of some transgenes may prove deleterious. Furthermore, not all nuclease RNA or DNA will yield the desired mutations. Therefore, the UMASS Transgenic Animal Modeling Core can only guarantee the minimum number of transfers of injected embryos into pseudo-pregnant recipients (8), and the number of mice born (approximately 35-40).

***Charges for pronuclear injection services as described above = \$5,500 per construct***

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

Date Received \_\_\_\_\_  
ES Clone name(s) \_\_\_\_\_

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

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

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