

STANDARD OPERATING PROCEDURES
DIVISION OF COMPARATIVE MEDICINE
UNIVERSITY OF SOUTH FLORIDA

SOP #423.1

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TITLE:	Embryo Collection and Transfer Procedures from Quarantine
SCOPE:	Animal Care Personnel
RESPONSIBILITY:	Facility Manager, Supervisor and Technical Staff
PURPOSE:	To Outline the Proper Procedures for Superovulation, Mating, and Embryo Collection for Rederivation of Compromised lines.

I. PURPOSE

1. This SOP outlines the proper procedures to be followed for mouse rederivation into the Transgenic Mouse Services Core using embryo transfer.

II. RESPONSIBILITY

1. It is the responsibility of the Facility Manager and/or Supervisor to ensure that all technical staff performing these methods are adequately trained in the following procedures and these procedures are adhered to.
2. It is the responsibility of the technical staff assigned to rederivation procedures to read, understand, and follow the procedures outlined below.

III. PROCEDURES

DAY ONE

1. Identify which female mice will serve as donors (ideal age is between 3-5 weeks of age). Administer 0.1-0.15 mL (5 -7 IU) of Pregnant Mare's Serum Gonadotropin (PMSG) intraperitoneally (IP) at a designated time. The specific dose given will be dependent on the age of the females and will be instructed at the time of superovulation.

DAY THREE

1. 46-48 hours after PMSG injection, administer 0.1 mL (5 IU) Human Chorionic Gonadotropin (hCG) IP to the same donor mice and the females are then placed with experienced stud males at a 1:1 ratio.

DAY FOUR

1. All mice are checked before 9 AM for coital plugs. Female mice are euthanized via cervical dislocation in room 20071.

2. Snip skin and dissect until ovarian fat pad is identified. Remove the ovaries, ampulla, oviduct and uterus gently with forceps. Place tissue into sterile PBS media (2 mL in 10 ml conical tube) and swirl.
3. Wipe conical tube with Oxivir-Tb and hand off to a clean individual who will transfer the conical tube to Procedure room 20223.
4. In room 20223, the tissues are transferred to a sterile petri dish with sterile PBS media at room temperature (37 degrees C) and the ampulla harvested post mortem and transferred to Sterile M2 media. The petri dish is covered in a larger petri dish which is then wiped with Oxivir-Tb and transferred to an individual in Core room 20222.
5. Following embryo transfer into recipient, rodent health monitoring and surveillance of surrogates and pups will be followed as described in **SOP #410 Sentinel Rodent Health Surveillance** and **#411 Rodent Quarantine**.

Approved:

Date: