# Embryo/Sperm Cryopreservation Request Form
## Mouse Genetics Core Facility
## Cedars-Sinai Medical Center
## Core Director: Makoto Katsumata, PhD
## 310-248-6523 (x86523), Davis Building 2067

Request #:_____-_____ Core use only  Date:_____ (please submit this form for each mutant line)

Principal Investigator:_____  Phone #:_____  Email:_____

Office location:_____  Lab Location:_____

Contact person (if not PI):_____  Phone #:_____  Email:_____

Account (project #):_____  Account (activity #):_____  Account administrator:_____

IACUC Protocol #:_____  Approved? ☐ Yes ☐ No  Expiration Date:_____

Protocol title:_____

I would like to cryopreserve: ☐ Embryos ☐ Sperm ☐ Both ☐ w/ optional recovery test by IVF

## Background of your mutant strain

Animal room #: _____  Are your mice SPF? ☐ Yes ☐ No (name of pathogen[s]: _____)

☐ Natural mutant ☐ Transgenic ☐ Knockout (Knock in) ☐ Homozygote ☐ Hetero(hemi)zygote

Nature of the mutation (lethal if homozygous, etc.):_____

Reference paper (if any):_____

Is the line hetero(hemi)zygous or homozygous? → Does the line need to be cryopreserved as homozygous?

Your heterozygous male breeder(s) will be crossed with wild type egg donors. Therefore, resulting embryos for cryopreservation will be half heterozygous and half wild type.

No → Your homozygous male breeder(s) will be crossed with wild type egg donors. Therefore, resulting embryos for cryo-preservation will be all heterozygous.

Yes → Please provide ~10 egg donors between 3~4 wks or >8 wks of age and 1~5 or more proven male breeders (1~2 egg donors/male breeder). If you are in a hurry or troubled with poor breeders, heterozygous cryopreservation may be the only option.

Cryopreservation can be performed with either facility-provided wild type egg donors or user-provided egg donors

| Name of your mutant line | Male/ Female? | Homo/ Hetero? | How many? | Age range (wks) | Proven breeder? | Genetic background (C57BL/6, FVB, etc.) | Preferred strain for egg donors |
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Purchasing of wild type egg donors for production of more than 100 fertilized eggs is included in the service charge. If you provide egg donors from your own stock, total cost could be significantly reduced. However, egg donors need to be between 3-4 weeks or more than 8 weeks of age. Egg donors between 4-8 weeks of age would not produce enough eggs upon hormone injection. Also, the core recommends cryopreserving fertilized eggs rather than sperm because the user will need to rederive the line by IVF with the cryopreserved sperm instead of simple embryo transfer in the future, resulting in additional uncertainty and costs.
Currently, reestablishing a mutant line from cryopreserved sperm is still challenging, but intracytoplasmic sperm injection (ICSI) can be performed with additional costs if IVF is problematic. The core would like to know how many males and females are available for production of fertilized eggs for cryopreservation. Please note that all egg donors and sperm donors will be sacrificed. If you freeze eggs and sperm at the same time, total charge is discounted by $200.

Please contact core director to discuss rederivation procedures for individual situations.

## Core use only

| | Wt egg donors | Options | | Own egg donors | | Egg/sperm combo | | Recovery | | Recovery w/ IVF |
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Revised on 4/18/13