

# UCL Transgenic Service Rederivation Request Form

## ***User details***

## ***Date Submitted***

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Owner: \_\_\_\_\_  
Responsible: \_\_\_\_\_  
Department: \_\_\_\_\_  
Email: \_\_\_\_\_  
Telephone: \_\_\_\_\_

## ***Strain Information***

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Strain or gene name: \_\_\_\_\_  
Jackson MGI no.(if available) \_\_\_\_\_  
Genetic Background of strain: \_\_\_\_\_  
Genotype (homo, hetero): \_\_\_\_\_  
Backcross generation (if known): \_\_\_\_\_ Coat colour: \_\_\_\_\_  
Known fertility problems: \_\_\_\_\_  
Adverse Phenotype: \_\_\_\_\_  
Severity limit: \_\_\_\_\_  
Details of mutation: \_\_\_\_\_  
Justification for use:

Genotype/strain of female mice to be used (WT, hetero, hom) \_\_\_\_\_  
No. of males available: \_\_\_\_\_ DOB of males: \_\_\_\_\_ Proven fertility? \_\_\_\_\_  
Project licence covering the strain: \_\_\_\_\_

## ***BSU Contact Information***

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BSU staff responsible for the line: \_\_\_\_\_  
Phone Number: \_\_\_\_\_  
Contact email: \_\_\_\_\_

## ***Administrative and financial information, please fill in:***

Pyrat project code: \_\_\_\_\_  
PyRat licence code: \_\_\_\_\_  
Animal code: \_\_\_\_\_  
Health report attached? Yes No

The above customer code will be charged for the rederivation on the 01 suffix unless otherwise specified.

# REDERIVATION OF MOUSE LINES

## Generating live embryos

### Introduction

Why rederive? The purpose of rederivation is to provide mice with a specific pathogen free (SPF) status to researchers. Mice that harbour known pathogens are used to produce pre-implantation stage embryos which are washed, moved into the facility's barrier room and implanted into a SPF foster mother. The Transgenic (TG) rederivation service can produce SPF pups ready to move into a barrier facility in 9-12 weeks after the stud males have been received.

### Home Office licensing

Rederivation work at UCL is currently carried out under project licence (PPL: P3A10AFEC) which allows importation/rederivation of genetically modified strains, without needing new Home Office approval. The mice will be transferred to the User's project licence at weaning but kept under our supervision in IVCs cages until health screen is completed. Please ensure that (if necessary) your project licence is amended in good time to cover the new strain, amendments must be submitted 4-6 months before the start of the project.

Important – to ensure your strain is included on the project licence, please modify *Request form* with all details of your strain and email it to [tgservice@ucl.ac.uk](mailto:tgservice@ucl.ac.uk). This must be done before embryo rederivation work can begin.

### Animals required for rederivation

The aim is to produce around 50 embryos per line and transfer into 3-5 pseudo-pregnant females. This should produce enough offspring of the required genotype to start a new colony. You will be required to provide 4-6 single-housed young adult stud males, ideally 2-4 months of age.

Ideally these males will be mated to a standard wild type strain (e.g. C57, CD1) which will be supplied by us. However, if you wish to rederive a homozygote line, we will need you to provide 12-15 females. The age of the females will be dependent on the individual project and, however 3-4 weeks old females would be preferable.

### Procedure for producing embryos for rederivation

A batch of females will be super-ovulated or naturally mated with the stud males for three weeks or until desired number of embryos is transferred. Since superovulation is strain-dependent, the yield of embryos for rederivation is not always predictable.

Pups will be biopsied for genotyping between 10-20 days and foster mother will be sent for screening. Serology results indicate clean health status; pups are released for the investigator to use. The entire process normally takes 9 weeks minimum.

### Special notes

If the males provided fail to mate after 3 attempts, the investigator will be notified.

Additional charges will be applied if a strain which responds poorly to mating/superovulation is used, the user will be notified after three unsuccessful attempts (i.e. poor embryos quality produced each time)

If the foster females fail to deliver live pups, the process will be repeated at no additional cost (other than the cost of more female egg donors, if needed). The investigator must inform the facility if the strain exhibits any severe defects or lethality, so that the pups can be properly monitored.

If the foster females fail to deliver pups of the proper genotype, the process will be repeated at no additional cost (other than the cost of more female egg donors, if needed) AFTER the investigator has done appropriate genetic testing on the dirty males to confirm their genotype and their ability to detect the gene(s) in question.

### **Fees payable by Users**

**Rederivation charge = £2500** per strain. The fee includes purchase and maintenance of mice needed for rederivation (e.g. WT females) and maintenance of the newly generated animals until weaning. The fee will cover all procedures carried out by TG Service to establish the rederived stock (to the embryo numbers indicated above). The animals will be sampled at weaning at your expenses. The fee doesn't include maintenance of the stud males, the males will remain under your customer code. The cost will be charged to the above Customer code with associated grant code unless an alternative is indicated. External customers will need to supply an invoice address and order number.

We cannot initiate a project of rederivation if you do not supply your Customer Code, if unsure, please ask the NACWO of your unit to provide you with the right code.

**Recovery of a cryopreserved strain to generate live offspring = £2500 (£3000 for IVF).** This charge will apply whether the procedure is intended to generate live born mice for experiments (i.e. to recover the strain) or whether it is an "in vivo quality control" procedure. The fee does not cover shipment and you will be required to arrange it with the supplier. However we can be used as point of contact. Delivery address and point of contact should be:

Transgenic Service  
UCL, Kathleen Lonsdale Building  
Biological Service Unit  
5 Gower Place  
London  
WC1E 6BS  
United Kingdom

**Note: Non-UCL based institution and/or scientist will have to add 20% and VAT to the price of the service.**

Also for international imports a DEFRA import license need to be obtained by the importing customer. We suggest calling the AHVLA on 01228403600 if you need help