



MRC Harwell Archive – FAQ's

1. What are the benefits to me?

There are many direct benefits of using the archive:

Each mouse strain is securely archived by a team of highly trained staff that use the most up to date technologies.

The archive implements full quality control of the material it freezes so you know that the strain has been safely archived.

The archive will take care of all the logistics associated with disseminating the mice.

2. How much does it cost to archive a mouse line?

MRC Harwell is able to provide a free of charge archiving service for all material accepted by the European Mouse Mutant Archive (EMMA) excluding shipping costs.

Recent innovations in the handling and shipping of epididymis allow us to accept unfrozen epididymis as an alternative to shipping live mice prior to sperm archiving. This innovation improves animal welfare and drastically reduces the shipping costs to our facility.

You can find further information on epididymis dissections within the training area of our website (URL to Advance if you can get it in}, or contact us directly {include linke to resource enquiry form}.

3. Does the archive make a profit archiving my mouse strains?

No, the archive is a non-profit entity operating on a cost recovery basis. The charges it levies for the dissemination of frozen materials or rederived live mice go towards maintaining the archive and financing the 'free' archiving service for future generations of scientists.

4. Who will be able to access my mouse strains?

If you are still in the process of publishing your research we offer a 2 year 'Grace Period' during which time details of the strain would not be displayed on the public website. Once the grace period has elapsed the mice will become available to the scientific community.

Strains are made publicly available to scientists around the world via <https://archive.har.mrc.ac.uk> <https://www.infrafrontier.eu/> and www.findmice.org/



However, the beneficial rights of the producer are protected by a Material Transfer Agreement that the client has to sign before a strain is released from the archive.

5. Will for-profit organisations have access to my mouse strains?

The archive will forward all enquiries from for-profit organisations to the depositor for subsequent contract negotiations. The mice will only be released once permission has been granted by the depositor.

6. Will I be recognised for my work in producing these lines?

We actively promote the acknowledgement of our depositors by ensuring the institute and the primary publications are clearly displayed on our website.

We also work to protect your IP by exchanging an appropriate Material Transfer Agreement (MTA) when your mice are distributed to members of the scientific community.

Depositing biological resources in public archives is increasingly being recognised as an important project deliverable for many funding agencies and is being actively encouraged. Details of every strain held in the archive are presented on the IMSR, EMMA and MRC Harwell websites, which increases uptake by the community and the citation rate of primary references.

7. Will I have to spend lots of time breeding mice to send to the archive?

Whenever possible the archive will freeze strains as sperm or IVF derived embryos. These procedures require no more than 5 mature males. However, additional breeding may be required to freeze strains carrying complex genetics. In these circumstances, if the depositor is unable to provide a sufficient number of embryo donors, the archive may take on the responsibility of the additional breeding on their behalf.

8. My project license is coming to an end. How long does the archiving process take?

This is a popular service and we cannot guarantee that we will be able to accept every strain at short notice so it is advisable to plan ahead. Please be aware that a depositor's Material Transfer Agreement (MTA) needs to be signed before the mice are sent to MRC Harwell.

Once we have received the mice it will take approximately 3 months to fully archive a strain and perform all the necessary quality control tests.



9. What happens if I want to retrieve one of my mouse strains?

The archive treats all requests in the same way, even those from the original depositor so you would be asked to pay the normal charges and may be asked to sign a Material Transfer Agreement if you have moved to a new institution.

10. Why should I archive my mouse strains?

Archiving your mouse line protects your strains against genetic drift. An average line accumulates 100 mutation events per generation. This means most strains will be genetically distinct within a few years from the mice that were originally generated. Archiving your line at the point of publication or when it is initially produced provides an anchor point that can be revisited in the future.

In addition, cryopreservation secures the strain against accidental loss and removes the costs associated with the maintenance of mouse colonies. This is particularly the case for lines that are no longer needed; reducing the number of animals that are bred unnecessarily

Routinely archiving mouse strains is good colony management practice; it facilitates sharing, upholds the 3R's and is financially beneficial.

11. Will my mouse strains be secure in your facility?

The majority of lines can be cryopreserved as spermatozoa. A line is considered fully archived when 3 to 5 mature males (30 to 50 sperm samples) are cryopreserved. If your strain is an inbred line or has a complex genetic background, we would freeze embryos. Typically this requires approx. twenty young females and two mature males. Mouse strains that we freeze as embryos will be considered fully archived when 250 to 300 two-cell embryos have been cryopreserved.

Cryopreserved sperm and embryos are viability tested ensuring each mouse strain can be resurrected when required. We split our archived samples between different buildings to minimise the risk of physical damage e.g. through fire/flooding.