

## THE HARWELL ARCHIVE: ACQUIRING AND SHARING RESOURCES

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Cryopreservation of mammalian embryos and sperm is seen as a key aspect of good colony management which supports the drive towards improvements in laboratory animal care and the implementation of the 3Rs (Replace, Reduce, Refine). However, following the advent of gene editing technologies, the generation of new mouse models is quicker and cheaper than ever before. This has led some to question the future value of global biobanks. Nevertheless, there is a strong argument that the need to cryopreserve mouse strains and distribute them from well funded repositories is as necessary as it has ever been.

Repositories are not simply archives for unwanted mouse strains. Biobanks will freeze strains for free and subsequently distribute identical quality controlled material to the community removing the need to recreate mice. What is more, repositories such as EMMA (European Mouse Mutant Archive) act as genetic libraries accessible to all which provide a check point in the development of mouse strains eliminating the risk of genetic drift and breeding failures. Investigators looking for a particular mouse model can take advantage of the International Mouse Strain Resource (IMSR) which operates as a virtual archive by displaying all publically available mouse strains from around the world.

In summary, cryopreservation makes genetic resource sharing easier, cheaper and improves animal welfare by eliminating the need for live animal shipments.