Frequently Asked Questions

What are the pump priming awards for?

Awards are for UK-based research groups to receive knockout (KO) mice from the International Mouse Phenotyping Consortium (IMPC) via the Mary Lyon Centre (MLC) at Harwell, to establish colonies and undertake early biological investigations that build on existing research activities and underpin longer-term research goals that would be supported through standard funding mechanisms.

With this award, the MRC aims to achieve the following:

- Support early up-take and further phenotyping of the IMPC KO mice to underpin future research proposal(s) and maximise the value of MRC’s partnership investment in the IMPC
- Focus the UK academic research community's attention on the importance of using well-validated, comprehensively-phenotyped models in animal research, as available through the IMPC and MLC
- Highlight the IMPC resource as a means of minimizing duplication of mouse knockout work, thereby reducing the number of animals used in research model development.

Who is eligible?

Awards are aimed at existing or new users of MLC services. This call follows standard RCUK eligibility criteria and is open to UK-based researchers who can show they will direct the proposed research and be actively engaged in carrying it through. UK Higher Education Institutes (HEIs) and independent research organisations (IROs) are eligible.*

*We do not expect MRC’s large and flexible strategic investments (e.g. institutes, units, regenerative medicine hubs etc) to need to access these small funding packages, given existing substantial, long-term funding that can be deployed to support this type of work.

*Where applicants have substantial funding in an area very similar to the research proposed, the Award Panel will consider whether this could reasonably be expected to deliver the plan of work outlined within this application. Applications that seek to conduct research which clearly has no other funding route will be prioritised for funding. Applicants must state all current funding held in their CV and may wish to clarify why existing funds cannot be used for the experiments proposed in a cover letter.

Applicants are expected to have the necessary interests, expertise (e.g. in working with animals), licences and facilities in place to deliver the pump-priming and to take this forward as part of wider research activities.

For further information, please refer to Financial support available and Eligibility on the MRC website.

What is the IMPC?

The IMPC is an international, collaborative effort to produce an “encyclopaedia” of the mouse genome through broad-based phenotyping of knockout mice for every gene. To date over 5,000 KO mouse lines have been established, phenotyped and banked.

The MRC became a founding partner of IMPC when it was established in 2011 and has recently committed further support until the end of 2018 through its investments in MRC Harwell (principally the MLC). This reflects the MRC’s recognition of (i) the research community’s need for well-validated, comprehensively-phenotyped mouse KO lines and (ii) the need to uphold the principles of the “3Rs” through minimising the number of researchers independently creating the same knockout line.

What is the Mary Lyon Centre (MLC)?

The Mary Lyon Centre is a national facility supported by the MRC for mouse functional genomics, providing world-class expertise and tools to generate mouse models of human disease for MRC Harwell and the wider research community. In addition to the IMPC, the MLC can offer (i) Bespoke animal work including drug challenge and ex vivo analysis and (ii) use of the MRC’s Frozen Embryo and Sperm Archive (FESA). Depending upon the facilities available at the award’s host institution, in exceptional circumstances it may be appropriate to outsource a proportion of mouse work to the Mary Lyon Centre, or other animal facility. For direct MLC enquiries please contact impc@har.mrc.ac.uk.
How do I know if the mouse line I want is available?

Check availability of the knockout of interest by searching the IMPC database and then obtain confirmation from the Mary Lyon Centre via impc@har.mrc.ac.uk that this can be supplied through the Award.

If the mouse knockout is not yet available or only the ES cell line has been made, it can’t be requested in this call.

What is the value of the award?

Awards will be in the range of £20-40,000, with 12 to 25 awards made.

What are the key dates for the award?

The closing date for applications will be Thursday 6th July 2017 at 4pm (16:00 BST), with outcomes announced in November 2017. We expect MTAs to be signed off, and spend to commence, by January 2018. Applications are expected to be 12-24 months in duration.

What can I use the pump priming award for?

The awards should support the costs of obtaining a KO mouse line from the IMPC mouse resource, establishing a colony and undertaking preliminary biological studies to underpin longer-term research.

Some of the award must be used for preparation and shipping costs to receive material from the relevant IMPC repository. These costs will vary according to point of origin and material shipped. Delivery of all material for this award will be co-ordinated via the Mary Lyon Centre.

<table>
<thead>
<tr>
<th>Approximate Shipping Costs</th>
<th>Cost</th>
</tr>
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<tbody>
<tr>
<td>Frozen sperm</td>
<td>£850 + VAT</td>
</tr>
<tr>
<td>Frozen embryos</td>
<td>£850 + VAT</td>
</tr>
<tr>
<td>3 live breeding pairs⁵</td>
<td>£1850-£3000 + VAT</td>
</tr>
<tr>
<td>Mixed-sex, genotyped live cohort⁶</td>
<td>£3,200 + VAT</td>
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⁴ Costs will vary depending on whether the material is currently housed at the Mary Lyon Centre at Harwell, UK, or needs to be shipped from an overseas IMPC partner.

⁵ We expect applicants to request frozen material as standard, for animal welfare reasons and because re-derivation of live mice is likely to be a requirement of the recipient animal facility.

⁶ E.g. 10 homozygotes, 10 heterozygotes and 10 wild types at 6 weeks of age (both sexes), genotyped

Other appropriate uses of funds include:

- animal housing, breeding and husbandry costs
- technician/Researcher time
- consumables costs
- limited levels of travel if partnerships are involved – e.g. with other academics, industry or MLC

The funds may be used flexibly and, if appropriate, a proportion can be directed to the MLC to undertake some of the work proposed (e.g. specialist phenotyping assays or breeding programmes where the applicants only seek tissue).

All applicants are required to make initial contact with the Mary Lyon Centre prior to submitting their application, to check that the KO line is available and to agree supply format and cost. Any applicants wishing to extend their use of Mary Lyon Centre services as outlined above must discuss the feasibility of their plans with the Mary Lyon Centre prior to applying. The Centre can be e-mailed at impc@har.mrc.ac.uk.

If a substantial proportion of outsourcing work is to be undertaken by MLC or another body, applicants should discuss their plans to the MRC for discussion before formal submission (lindsay.wilson@headoffice.mrc.ac.uk).

Can I use this award to build on research that I hold funding for?
Yes. However, existing funding should not reasonably be expected to deliver the plan of work outlined within the pump priming award: we request details of current funding in applicants’ CVs; if there are strong similarities, the differences should be clearly set out in a Cover Letter, together with the reasons why existing funds cannot be used for the experiments proposed. It is strongly recommended that you discuss any uncertainties with the Programme Manager ahead of submission, via email to lindsay.wilson@headoffice.mrc.ac.uk.

**Do I need to have existing MRC (or other) funding to be eligible?**

Applicants are expected to have other funding to underpin this work because the pump priming awards only support direct research costs. Previous or existing Research Council funding is not a requirement of the call.

**Can awards be renewed?**

No. Any follow-on funding will be considered in open competition through standard grant funding routes.

**Can I apply if I am a member of an MRC institute or unit (including MRC university units)?**

Yes, however, we do not expect MRC’s large and flexible strategic investments (e.g. institutes, units, regenerative medicine hubs etc) to need to access these small funding packages, given existing substantial, long-term funding that can be deployed to support this type of work. It is acceptable for a researcher based at an MRC unit or institute to act as a co-applicant on an application.

**I have previously accessed IMPC KO mice – will this affect my application?**

No. The awards are not biased towards researchers accessing IMPC knockout lines for the first time. We will collect data about your previous use of the IMPC for information only.

**Can I seek funding through this initiative to do research on an IMPC line I already have, or have already ordered?**

No. Further research on IMPC mice that have already been obtained by the research group is not supported by this call. However, additional IMPC KO lines can be requested by existing IMPC users, provided that applicants can demonstrate that the research proposed is new and has not already been funded through other routes. Funding is targeted at researchers accessing and utilising IMPC KO lines that they do not already have access to.

**Can I seek funding to study a KO mouse line that has not been sourced from IMPC?**

No. Only KO mouse lines generated and banked through the IMPC can be requested.

**What can the award not be used for?**

This is discussed above in Financial support available on the main call text. In brief, funding will support direct research costs at 100% as an Exception but will **not** support indirect or estates costs associated with FEC through standard TRAC methodology. It is important that Research Offices are made aware of this restriction. Examples of what **cannot** be funded by this award include:

- Capital expenditure
- Salary contributions for Principal Investigator and Co-Investigator (unless they are actively undertaking the laboratory research activities)
- PhD studentships. However, where the research is compatible with, and augments, their own project, existing PhD students may undertake some of the work planned, drawing on the consumable funds provided through the award.
- Costs related to animal licences, publication costs and conference travel (although some travel to meet relevant collaborators may be requested).

A step-by-step Award-specific JeS application guide is provided to help applicants complete the application correctly.

**Can my PhD student do the work for this Award?**

Yes, but restrictions apply. We recognise that this Award may provide an opportunity for PhD students to learn important skills, and that the results have the potential to augment PhD research. However, the Award **cannot** be used to establish, part-fund or financially sustain PhD studentships. If PhD students
will carry out work on the Award, a Cover Letter should describe how the planned work complements and builds on their PhD scientific objectives and development goals.

Can I apply as part of a collaboration?

Yes. Standard guidance applies for applicants wishing to engage in collaborations. For further details, please refer to Section 1.3 of the MRC’s general Guidance for Applicants.

I have never worked with animal models, can I apply?
My RO does not have any animal facilities, can I apply?
Do I need a Home Office license?

The purpose of the awards is to establish mouse colonies and undertake early biological studies that provide a platform for longer-term work. Unless the proposal plans to use MLC to manage the mouse work and supply tissues, the applicants will need the necessary Home Office Project and Personal licenses to carry out the work. The preliminary research data generated is expected to underpin future grant applications for follow-on research. In the absence of appropriate experience or facilities, applicants will not be able to demonstrate that they can carry out follow-on studies.

Can I resubmit an application that was not successful last year?

We strongly recommend that applicants do not resubmit applications that were unsuccessful last year, as the same assessment criteria will apply.

When is the deadline for applications?

You must submit your application to MRC by Thursday, 6th July 2017 at 4pm (16:00 BST). Applications received later than this will not be considered.

What is the assessment process?

Assessment and funding decisions will be made by a MRC Cross-Board Advisory Group comprising independent experts across a broad range of science disciplines.

When will the money be available?

The Award Group will meet to discuss applications in November 2017. Funding letters for the first call will be issued in late November or early December 2017. Spend will not be able to start until the MTA has been signed: we expect this to happen promptly following award announcements.

How long is the award for?

Awards are expected to run for 12 to 24 months after activating the grant. Grants are expected to be activated within 3 months of notification of the award. The awards are short-term and extensions are unlikely to be awarded.

Will the MRC run future calls?

No additional calls are planned.

Can I see which applications were funded last year?

Awards made in last year’s pump priming award will be visible on Gateway to Research from May 2017 and can be found using the search term “IMPC:”

Are there other award initiatives with a focus on the Mary Lyon Centre?

Yes. We have provided £2.5m for the Mary Lyon Centre to administer the Genetically Engineered Mouse Models (GEMMs) initiative. Through this award, genetically modified mice whose modifications promise to answer important biomedical research questions with relevance to disease will be prioritised for production and release to the research community by the Mary Lyon Centre. For further information on this, please contact the Mary Lyon Centre directly on gemm@har.mrc.ac.uk.