

Request for Proposals: Space Allocation Requirements for Female Mice with Litters

Proposal Due Date: January 20, 2012

Form: Please use the “Full Proposal Application” form on the following site:

<http://www.aclam.org/foundation>

This RFP solicits proposals to better define optimal housing for breeding mice in research laboratories/vivaria. Optimal is defined as pertaining to both animal welfare and production of mice for research.

The ACLAM Foundation will support funding up to \$200,000 to examine space requirements for female mice with litters. Funding will be limited to a maximum of \$50,000 total per grant. Facilities and Administration (F&A) costs will be allowed up to 10% of the grant total and can be in addition to the \$50,000.

The request for proposals was generated because of the change in guidelines delineated in the 8th edition of the Guide for the Care and Use of Laboratory Animals. ACLAM believes the data to support cage size for breeding mice in pairs and trios are insufficient for definitive guidance. As such we are soliciting proposals to address this short coming. Research proposals should be designed around current US mouse cage sizes ranging from 67 to 81 square inches. Additionally, inclusion of commercially available (In the US) sizes that would address cage size requirements to meet new trio breeding guidelines (e.g. at least 117 in² size cages) will be considered an advantage to the proposal.

Implicit in the experimental design of any protocol is the need for accurate control and documentation of all environmental complications—temperature, humidity, light, and environmental enrichment types, as well as control of opportunistic pathogens. Air flow characteristics must be reported for individually ventilated cages. In addition all applications must be in compliance with PHS policies and must be reviewed by an IACUC.

Important characteristics to consider when submitting a proposal in addition to cage size and mouse strain include: feed type, bedding type, breeder age and parity number, pup weight, pup numbers, cage change/cleaning frequency, and a careful consideration of the statistical power of the outcome measures.

Although there are several questions that can be asked regarding the cage size for litters, the ACLAM Foundation has prioritized funding in this RFP to the most salient issues. Therefore the following guidelines should be followed:

1. Individually ventilated cages and/or static microisolator caging are acceptable for this proposal; open-top caging is not.
2. Nesting materials should be used and specified, but other enrichment modalities are discouraged due to the variables introduced in comparing studies.
3. Each proposal should include an outbred strain (developed from ICR) and an inbred strain (C57BL/6N or C57BL/6J); other commonly used strains may be proposed additionally, particularly those used as background strains for genetically modified mice.

Please note that Charles River Laboratories will donate mice breeders for this RFP if you choose to use their mice.

4. If behavioral evaluations are proposed, they should be done immediately after weaning to eliminate the impact of a new housing environment.
5. Clinical chemistry profiles, histology, blood cell analyses, and physiological parameters are considered of less value for this proposal.
6. Culling vs. not culling litters is an important question, but for this proposal is considered of less importance for research breeding of genetically manipulated mice, where every pup can be uniquely valuable.
7. The ACLAM Foundation will coordinate contact between funded proposers to ensure that similar types of data collected will be comparable across institutions. (i.e., nesting materials and mouse strains)

Detailed information regarding submission:

Full Grant Proposal

- Following the first level of review, full grant proposals will be requested from selected applicants. Full proposals (original signed copy) **must be postmarked no later than January 20, 2012 and an electronic version** (disc or email gregory.boivin@wright.edu) **must arrive no later than January 20, 2012. You will receive a confirmation of receipt of your electronic submission. If you do not get a confirmation please contact Dr. Boivin.**

I. **Intent** The full grant proposal should be designed to convince the reviewers that the applicant has identified a significant question and has developed a logical research plan and knowledgeable research team to address the question. Specifically comment on the relevance of the proposed study to advance scientific knowledge in the fields of laboratory animal science and medicine and/or to benefit the health and well being of laboratory animals. See the Conditions of Award section below.

II. **Format** The full proposal document must comply with the format of the form provided:

- Four form pages covering project title, institutional contact information and signatures, investigator names, budget, budget justification, facilities and major equipment information
- The body of the proposal cannot exceed six letter size pages
- 11 point type or larger, 1 inch margins
- Strict attachment limits are detailed below.

III. **Content** The full proposal must include:

- The front page must contain all information and be signed

- Pre-approval from the Institutional Animal Care and Use Committee (IACUC) at the institution where the animal experiment(s) will be conducted prior to funding being provided
- Detailed budget, not to exceed \$50,000 [PI salary requests should be limited to the minimum acceptable by the home institution, total salary requests representing the major budget item is also discouraged, separate animal purchase and per diem costs.] [**The Foundation will provide up to 10% in F&A costs for this RFP only. Funds will not be provided for major equipment, travel, or graduate student fees/tuition.**]
- Detailed budget justification, facilities, and major equipment available for the grant
- Specific Aims and Hypothesis
- Background and the relevance of the project (optional inclusion of preliminary data: although not required it is highly recommended)
- Review of the study question and specific research objectives
- Description of the research plan, with a time line for experiments (one year maximum)
- Attachments: Résumé and References

IV. **Attachments** are strictly limited to:

- Two-page résumé for the PI. Please include relevant publications and other research funding. (It is not required that the Foundation form be used.)
- One page résumé for each co- PI or collaborator. Please include relevant publications and research funding. (It is not required that the Foundation form be used.)
- One page pre-approval from the IACUC (International investigators will receive additional instructions by the Foundation staff.)
- One page of References

V. **Review Process** Reviewers will evaluate full proposals based on:

- Scientific merit
- Consistency with the mission of the Foundation (see page 1)
- Expertise of the investigators and collaborators
- Appropriate animal use (compliance with the *ILAR Guide for the Care and Use of Laboratory Animals*)
- Feasibility of completion within the grant time limit (one year from the date of award)

- Adequacy of research facilities
- Appropriateness of the budget
- Please see Reviewer instructions on the aclam.org website if you would like more information

VI. Conditions of Award

- Grants are made to host institutions, not individual investigators or their department. Accordingly, full proposals **must bear the signature** of an official authorized to sign for the applicant institution. The principal investigator must hold a doctoral-level degree (DVM/VMD, MD, DDS, PhD or equivalent), with the one **Husbandry research topic** exception noted above.
- Grants are funded on an annual basis. The Foundation does not provide money for major equipment, travel or graduate student fees/tuition. The Foundation reviewers recognize that technician salaries are justified but they discourage excessive PI salary requests (please limit requests to the minimum accepted by the home institution) and discourage that total salaries be the major budget item. Future funding is dependent on research progress and a subsequent application to the ACLAM Foundation.
- Funded grant awards will be announced on the ACLAM web site (www.aclam.org) and to successful grantees by written letter in late **March**. Seventy-five percent of funding is provided at the time the grant is awarded. For payment of the last 25% of funding, a summary research report is required in lay language suitable for inclusion in ACLAM Foundation reports, fund raising solicitations and the ACLAM Newsletter. The Foundation Scientific Director must receive the final report no later than 90 days following the one-year anniversary of the grant award.
- Grant recipients are expected to publish their results in peer-reviewed journals and are required to present poster presentations at the ACLAM Forum following the year that the funding research project has been completed. The Foundation Scientific Director will provide guidance on ACLAM Forum poster presentations. If the investigator is unable to attend the forum the Scientific Director should be contacted for alternative options. **Research publications must acknowledge the support of the American College of Laboratory Animal Medicine Foundation.**

If you have any questions please contact Greg Boivin at Gregory.boivin@wright.edu

Sincerely,

Greg Boivin
ACLAM Foundation
Chair & Scientific Director