

DONOR-INSPIRED GRANT PROPOSAL GUIDELINES

LIMB-SPARING TREATMENTS FOR OSTEOSARCOMA IN GIANT-BREED DOGS

PROGRAM SUMMARY

The mission of Morris Animal Foundation is to bridge science and resources to advance the health of animals. This request for proposals is part of our Donor-Inspired Study program. This program allows individual donors to directly support a research topic they have a passion for, and for which there is a pressing need.

This grant is being funded by Dr. Fay Cho, a long-time lover of Saint Bernards, in memory of Biscotti, a beloved dog she lost to osteosarcoma. Working closely with the Foundation, Cho chose to direct funds to research aimed at improving the success of limb-sparing treatment options for Saint Bernards and other giant breeds.

WE ARE PLEASED TO ANNOUNCE WE ARE ACCEPTING PROPOSALS FOR THE STUDY OF LIMB-SPARING TREATMENTS FOR OSTEOSARCOMA IN SAINT BERNARDS AND OTHER GIANT-BREED DOGS.

- We are seeking innovative research likely to make a material difference to clinical options and survival times for dogs with appendicular osteosarcoma who are not good candidates for amputation.
- The donor is interested in clinical trials, including but not limited to Saint Bernards.

QUALIFICATIONS OF APPLICANT

- All investigators are eligible to apply.
- Competitive applicants will have a previous record of research and publication in canine oncology with evidence of access to sufficient populations of Saint Bernards and other giant-breed dogs diagnosed with appendicular osteosarcoma.

DONOR FUND CRITERIA

- **MISSION ADHERENCE:** Projects must advance the science of limb-sparing treatments for osteosarcoma in Saint Bernards and other giant-breed dogs. Projects oriented toward human health, other animal species, or breeds of dog that are not classified as 'giant' do not fall within Morris Animal Foundation's mission for this request for proposals and will not be accepted.
- **HEALTH STUDY POLICY:** Projects must adhere to Morris Animal Foundation's Health Study Policy for Animals Involved in Research.
- **APPLICATION LIMITS:** Morris Animal Foundation permits a maximum of one application to this fund as Principal Investigator. Proposals cannot be resubmitted through any other Morris Animal Foundation funding opportunity unless there is an invitation to do so.
- **RESUBMISSION:** Declined proposals may be resubmitted upon invitation only.
- **BUDGET:** The budget cannot exceed \$150,000.
- **DURATION:** Maximum study duration is 3 years.

APPLICATION PROCESS

Submit your application at maf.fluxx.io. Morris Animal Foundation grant applications have two components: an online form and a full proposal attachment. To submit an application, please complete the following:

1. **Online Application** with contact information for the investigator(s) and institution, and some key project information.
2. Full Proposal document, using the **proposal template**, uploaded to the online application (see proposal guidelines below).

When preparing your application, please be cognizant of any developments or potential impact of the ongoing COVID-19 situation on the proposed work and take this into account in your study design. These considerations should be described where appropriate.

REVIEW PROCESS

1. Researchers submit grant proposals.
2. Proposals are reviewed internally for adherence to guidelines.
3. Full proposals that pass internal review are assigned to two Scientific Advisory Board (SAB) member reviewers. Proposals are reviewed and scored based on [this rubric](#).
4. Reviewers present evaluations to the full review committee at a virtual review meeting. Based on scores, the SAB recommends projects for funding.
5. All projects recommended for funding are reviewed by Morris Animal Foundation's Animal Welfare Advisory Board (AWAB) for adherence to our [Health Study Policy for Animals Involved in Research](#).

PROPOSAL GUIDELINES

Failure to adhere to these guidelines will result in disqualification.

1. PROPOSAL FORMAT:

- A. Proposals must be completed using [this template](#). Please do not remove any headers or sections from this template. If any of the sections or questions are not applicable, leave the header in your proposal and indicate this with "N/A". The order of the written proposal must follow the outline described below, including the use of outline numbers and headings provided in the template.
- B. Single-spaced or greater with minimum 11-point font (Times New Roman or Arial font preferred) and ¾ inch margins.
- C. The full proposal must be converted to a single PDF document that includes all letters and attachments.
- D. Technical terminology should be defined on first usage; acronyms and abbreviations may be used subsequently.

2. PROPOSAL OUTLINE:

- A. **LAY AUDIENCE SUMMARY** (250-word limit)
- B. **TECHNICAL SUMMARY** (250-word limit)
- C. **TITLE PAGE** (one-page limit): Name, institution, and email address of Principal Investigator and all co-investigators.
- D. **STUDY PROPOSAL** (five-page limit including figures and tables; inclusive of a minimum 1-page on Potential Impact for Animal Health)
 - i. **HYPOTHESIS AND OBJECTIVES:** Be precise and enumerate specific, testable hypotheses with realistic objectives to be met within the timeline and budget of the proposal.
 - ii. **PROBLEM DESCRIPTION AND SIGNIFICANCE:** Clearly describe the background of the problem including a brief literature review and justify the need for the study. The literature review should indicate the current status of research in the area, including any preliminary data generated by the investigator(s) which led to this research question. If this project is a continuation of a previous or current Morris Animal Foundation study, include grant ID number, title and a brief summary of the progress and/or final results. Preliminary data will substantially strengthen your proposal.

- iii. **EXPERIMENTAL DESIGN AND METHODS:** Describe the experimental approach, including the design, experimental methods, number of animals, treatments and sampling schedules for each objective. A thorough description of proposed data analysis methods must be included.
- iv. **POTENTIAL PITFALLS AND MITIGATION PLANS:** Please note that 'N/A' is not sufficient.
- v. **POTENTIAL IMPACT FOR ANIMAL HEALTH:**
 - a. Scientific impact, including impact beyond this research field and future pathways
 - b. Non-academic impact: include stakeholders and beneficiaries (eg. public awareness, economic, policy, industry, environmental components). Who will benefit and why?
 - c. Engagement activities plan (eg. knowledge exchange activities)
- E. **SAMPLE SIZE CALCULATION** (no page limit): Describe the method of power analysis using the Sample Size Form provided in the proposal template.
- F. **ANIMAL INVOLVEMENT JUSTIFICATION FORM** (no page limit): Include the required Animal Involvement Justification (AIJ) form, provided in the [proposal template](#), in **ALL** proposals, regardless of live animal involvement.
- G. **RECOMBINANT DNA/BIOHAZARDS** (no page limit): Applicants using recombinant DNA techniques must confirm that they have complied with National Institutes of Health guidelines for this technology and that they have approval from their institution's Biological Safety Committee to conduct the proposed research if it is funded. Also indicate any other potential biosafety concerns, including the use of radiation.
- H. **FACILITIES AND EQUIPMENT** (one-page limit): Availability of necessary facilities and equipment to complete the proposed study should be documented. Include any approved or pending permits to conduct the proposed work. Any relevant permits must also be included at the end of the proposal. If more than one institution is involved, a letter of collaboration from the outside institution(s) must be included at the end of the proposal.
- I. **CITED REFERENCES** (two-page limit): Include complete citations referenced numerically in the body of the proposal.
- J. **BUDGET** (one-page limit): Use the required budget form provided in the [proposal template](#). Include annual subtotals and grand totals in all applicable fields. All funds must be U.S. dollars.
 - i. **AMOUNT:** The budget cannot exceed \$150,000
 - ii. **DURATION:** Maximum study duration is 3 years.
 - iii. **BUDGET** limitations:
 - a. **EQUIPMENT:** Requests for equipment purchases may not exceed \$5,000.
 - b. **TUITION:** Morris Animal Foundation does not pay for tuition.
 - c. **SALARY:**
 - 1. **FULL-TIME POSITIONS:** Salary requests for applicants in full-time employment in academic or non-academic settings will not be approved.
 - 2. **LESS THAN FULL-TIME POSITIONS:** Salary requests for time spent on the project are permitted but must be clearly defined and include the percent appointment and other current salary support.
 - 3. **TECHNICIANS, RESIDENTS, FELLOWS AND STUDENTS:** Salary requests are permitted but must be clearly defined and must include percent time commitment.

- iv. **TRAVEL:** Travel expenses required to complete the project should be clearly justified, particularly in terms of environmental concerns. Journeys must be essential and minimized with as low a carbon impact as possible; resources or activities that provide alternatives are preferred. Possible ongoing disruptions to travel due to COVID-19, particularly with international travel, should also be considered. Work should be conducted wherever possible by teams already in-country. Requests for travel to scientific or stakeholder meetings may not exceed \$2,000.
- v. **INDIRECT COSTS:** Indirect costs will not be approved.
- K. **BUDGET JUSTIFICATION AND TIMELINE SUMMARY** (two-page limit): Specifically justify the cost of each item in the budget. Costs not justified will not be approved. The role and percent effort of each individual for whom salary funds are requested should be clearly defined. For the timeline, indicate the sequence and schedule of experiments as well as the duration of the project. Justify that the objectives can be completed in the given timeline. A maximum of 3 year(s) is permitted. Include sufficient time to complete data analysis.
- L. **CURRENT AND PENDING SUPPORT** (no page limit): Only include financial support (e.g., federal, nonfederal, commercial, institutional) currently available in support of the Principal Investigator and co-investigators' research programs that have overlap with the proposed projects. Overlap, whether scientific, budgetary or commitment of an individual's effort greater than 100%, is not permitted. Further submissions to other funding sources should not duplicate this project unless we have officially declined to fund it. Please contact grantapplications@morrisanimalfoundation.org should you require further clarification. Provide the following information for all current and pending support.
 - i. **PROJECT ID**
 - ii. **FUNDING SOURCE**
 - iii. **PROJECT TITLE**
 - iv. **SUMMARY:** Brief summary of the objectives and results to date.
 - v. **BUDGET:** In the case of an active project, provide the budget. For a pending project, provide the proposed budget.
 - vi. **TIMELINE:** In the case of an active project, provide start date and projected end date. For a pending project, provide the anticipated start and end dates.
 - vii. **OVERLAP:** Summarize any potential overlap with the proposed project regarding the science, budget or committed effort.
- M. **BIOGRAPHICAL DATA** (two-page limit per individual): For each Principal Investigator, co- investigator and postdoctoral fellow (if the budget includes a request for more than 10% of a postdoctoral salary) provide the following information:
 - i. **NAME**
 - ii. **POSITION/ROLE** on this project.
 - iii. **CURRENT POSITION** (title, name, and address of institution).
 - iv. **EDUCATION/TRAINING** (degrees, institution, year of graduation, field of study).
 - v. **PREVIOUS POSITIONS AND HONORS** (include membership on any advisory committees).
 - vi. **SELECTED PEER-REVIEWED PUBLICATIONS** (include titles, all authors, and complete reference).
- N. **LETTERS OF SUPPORT:** Include support letters from all collaborators, funders and commercial partners.