



DONOR-INSPIRED GRANT PROPOSAL

Subvalvular Aortic Stenosis in Newfoundland 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 the Newfoundland Club of America Charitable Trust (NCA Charitable Trust), who has supported Morris Animal Foundation for nearly 20 years, making their first gift to support canine health studies in 2000. For over 20 years, the NCA Charitable Trust has been committed to funding research projects aimed at addressing critical health issues affecting the Newfoundland breed. Working closely with Morris Animal Foundation, the NCA Charitable Trust has chosen to support research aimed at addressing subvalvular aortic stenosis, with Newfoundlands being one of the most commonly affected breeds.

We are pleased to announce we are accepting proposals for the study of subvalvular aortic stenosis in the Newfoundland dog breed.

- There is particular interest in research focused on causation, mechanisms of disease, preventative measures, and/or large-scale studies of therapeutics. Other approaches that are innovative and likely to generate clinical impact also are welcome.
- Studies may involve Newfoundland dog populations outside of North America. Use of other giant dog breeds is acceptable if needed for comparative purposes.
- The NCA Charitable Trust is willing to facilitate recruitment for researchers through their access to 3,000 Newfoundland owners and 26 regional clubs in the United States, as well as international outreach.
- Researchers may also source DNA samples from the Canine Health Information Center (CHIC) program administered by the Orthopedic Foundation for Animals (OFA). This biorepository currently holds over 2000 samples from Newfoundland dogs (approximately 1200 blood-based and 800 swabs). This includes 38 owner-reported cases of subvalvular aortic stenosis. Applicants will need to contact the OFA (chic@offa.org) to discuss the nature of these samples and determine any costs; appropriate credit should be provided in the proposal and any resultant publications.

QUALIFICATIONS OF APPLICANT

- All investigators are eligible to apply.
- Competitive applicants will have a previous record of research and publication in relevant fields with evidence of access to sufficient populations of Newfoundland dogs and/or relevant databases or sample repositories.

DONOR FUND CRITERIA

- **Mission Adherence:** Projects must advance the science of subvalvular aortic stenosis in the Newfoundland dog breed. Projects oriented toward human health, other animal species, or other canine breeds (with the exception of other giant breeds for comparative purposes, as above) 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.

- **Resubmission:** Declined proposals cannot be resubmitted.
- **Budget:** The budget cannot exceed \$50,000.
- **Duration:** Maximum study duration is three years.

APPLICATION PROCESS

As of November 2019, Morris Animal Foundation has begun using a new grant application and management software called Fluxx. All past, current and new grant applicants will need to create a new account to access past grant information and submit new applications. Visit maf.fluxx.io to create your account and submit an application.

Both the Principal Investigator and the individual submitting the application (if different from the Principal Investigator) must create an account before applying for funding. Your account must be reviewed and validated by Morris Animal Foundation, which may take up to two business days, so please plan to create an account several days prior to the proposal deadline. For details on how to create an account and submit an application, view our [Fluxx Applicant User Guide](#).

Morris Animal Foundation grant applications have two components: an online form and a full proposal attachment. Applications **must be received by 4:59 PM ET** on the designated due date. 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).

We recognize that we are all monitoring and being affected by the COVID-19 outbreak across the globe at the time of release of this request for proposals. When preparing your application, please be cognizant of any developments or potential impact of the COVID-19 outbreak 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 number 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. **Abstract** (one-page limit): Abstracts should not contain information that identifies the investigators or any charts or graphics:
 - i. **Title:** Limit 150 characters, including spaces.
 - ii. **Rationale**
 - iii. **Hypothesis/Objectives**
 - iv. **Experimental Design and Methods**
 - v. **Preliminary data:** Not required but may be included.
 - vi. **Expected Results**
 - vii. **Pathways to Impact for Stakeholders**
 - viii. **Budget and Timeline**
 - ix. **Potential Impact for Cardiac Health of Newfoundland Dogs**
- B. **Title Page** (one-page limit): Name, institution, and email address of Principal Investigator and all co-investigators.
- C. **Study Proposal** (five-page limit including figures, tables and graphics):
 - 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. **Justification, Significance and Literature Review:** Clearly describe the background of the problem, justify the need for the study, and state the importance of expected findings. The literature review should indicate the current status of research in the area, including the investigator's contributions.
 - iii. **Preliminary Data:** Succinctly describe any previous results by the investigator which support the proposed research. 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.
 - iv. **Experimental Methods and Design:** Describe the experimental approach, including the design, experimental methods, number of animals, treatments, sampling schedules, potential pitfalls and alternative approaches for each objective. A thorough description of proposed data analysis methods must be included.
 - v. **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 three years is permitted. Include sufficient time to complete data analysis.
 - vi. **Expected Results:** Indicate expected results and your proposed plan for disseminating information generated by your work to scientific audiences, including peer-reviewed publications. Other stakeholders should be addressed in the impact plan.
- D. **Impact Plan** (no page limit): Using the Impact Plan Form provided in the [proposal template](#), describe how this project will contribute to knowledge and potentially improve animal health in areas **outside** of the academic sphere. Morris Animal Foundation strongly encourages our

research partners to design and conduct studies in ways that ensure the widest impact for our donor-sourced funding. Your impact plan should consider all important stakeholders, their potential involvement in the study itself, methods of communication, and areas in which awareness could be generated that might include Newfoundland owners or breeders, industry, government, the economy, or the general public. For an example of a competitive impact plan, [click here](#). Plans for scientific publications and other academic endpoints should be included in the Expected Results section of the study proposal.

- 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** (three-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 \$50,000.
 - ii. **Duration:** Maximum study duration is three years.
 - iii. **Budget Limitations:**
 - 1. **Equipment:** Requests for equipment purchases may not exceed \$5,000.
 - 2. **Tuition:** Morris Animal Foundation does not pay for tuition.
 - 3. **Salary:**
 - a. **Full-Time Positions:** Salary requests for applicants in full-time employment in academic or non-academic settings will not be approved.
 - b. **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.
 - c. **Technicians, Residents, Fellows and Students:** Salary requests are permitted but must be clearly defined and must include percent time commitment.
 - 4. **Travel:** Travel expenses required to complete the project should be clearly justified.
 - 5. **Indirect Costs:** Indirect costs will not be approved.
- K. **Itemized Budget Justification** (one-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.

- 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 has overlap with the proposed project. Overlap, whether scientific, budgetary or commitment of an individual's effort greater than 100 percent, is not permitted. Provide the following information for all current and pending support with overlap:
- 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.