1. **Abstract** (one-page limit)
2. **Title:**
3. **Rationale:**
4. **Hypothesis/Objectives:**
5. **Experimental Design and Methods:**
6. **Preliminary Data:**
7. **Expected Results:**
8. **Pathways to Impact for Stakeholders:**
9. **Budget and Timeline:**
10. **Potential Impact for Cardiac Health of Newfoundland Dogs:**
11. **Title Page** (one-page limit)
12. **Study Proposal** (five-page limit including figures, tables and graphics)  
    1. **Hypothesis and Objectives:**
    2. **Justification, Significance and Literature Review:**
    3. **Preliminary Data:**
    4. **Experimental Methods and Design:**
    5. **Timeline:**
    6. **Expected Results:**

**D. Impact Plan (no page limit)**: The table below is your opportunity as an applicant to 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, organizations or clubs, or the general public. For an example of a competitive impact plan, [click here](https://www.morrisanimalfoundation.org/sites/default/files/filesync/Example-Impact-Plan.pdf). Plans for scientific publications and other academic endpoints should be included in the Expected Results section of the study proposal.

**Impact Goal:** Describe the overarching impact goal of your research in one sentence:   
  
Click here to enter text.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Impact Objectives**  List two to three, in order of importance. | **Planned Activities**  What actions will you take to achieve your objective including who is involved, timeline, and any collaborators? | **Expected Beneficiaries**  Who will benefit or be an adopter, how will you communicate with them and/or involve them, how will this research meet their needs? | **Intended Outcomes**  Will these be scientific, public awareness, environmental, species conservation, policy change, economic and/or industry applications? | **Steps for Monitoring Progress**  What are the steps you will take to operationalize impact, monitor and evaluate progress? | **Attainability**  Describe your track record, potential to achieve impact, expertise, potential partners and stakeholders. For new investigators, describe the track record of mentors and/or collaborators. |
| 1. |  |  |  |  |  |
| 2. |  |  |  |  |  |
| 3. |  |  |  |  |  |

1. **Sample Size Calculation** (no page limit)

If you do not believe it is appropriate for your grant application to include sample size estimates, please include a brief explanation here.

Click here to enter text.

If sample size estimates are necessary for your study, continue filling out this form.

Proposed study design: Click here to enter text.

*Eg: case-control, randomized control trial*

Sample type: Click here to enter text.

*Eg: a single group, two or more independent groups, matched pairs*

Analytic approach: Click here to enter text.

*Eg: t-test, logistic regression, non-parametric analysis*

Statistical test:

*Eg: a mean, a difference in means, a proportion, an odds ratio, a risk ratio*

|  |  |
| --- | --- |
|  | Insert response: |
| Power (): |  |
| Significance level (): |  |
| Estimated (or desired) standard deviation: |  |
| Estimated detectable difference (if applicable): |  |
| Estimated between (within) subject correlation (if applicable): |  |
| **Estimated Sample size:** |  |

Please discuss any additional assumptions that went into your power calculation.

Click here to enter text.

1. **Animal Involvement Justification Form** (no page limit)

All studies receiving funding must adhere to the Foundation’s [Health Study Policy for Animals Involved in Research](https://www.morrisanimalfoundation.org/sites/default/files/filesync/Health-Study-Policy.pdf), which was written to ensure that every animal involved in a Foundation-funded health study receives excellent, compassionate care throughout the study. Please review the Health Study Policy prior to filling out this form.

All Morris Animal Foundation studies will be reviewed by the Animal Welfare Advisory Board (AWAB) for adherence to the Health Study Policy. All studies must be approved by the AWAB before funding can be awarded.

**Note: This form must be completed in its entirety, at time of submission. Incomplete forms may result in disqualification of the proposal.**

**SECTION 1**: **This section must be filled out, regardless of animal use (including invertebrates)**

1. Does this study…
   1. Involve live animals (including client-owned animals)? (yes/no) \_\_\_\_\_\_\_
   2. Use archived samples that were originally obtained from live animals? (yes/no)
   3. Use samples that will be obtained prospectively from live animals? (yes/no) \_\_\_\_\_\_\_
   4. Use archived samples that were originally obtained from animals that died from natural causes or were euthanized for clinical reasons prior to sample collection? (yes/no) \_\_\_\_\_\_\_
   5. Use samples that will be obtained prospectively from animals that die from natural causes or are euthanized for clinical reasons prior to sample collection? (yes/no) \_\_\_\_\_\_\_
   6. Use archived samples that were originally obtained from animals that were euthanized for an unrelated study prior to sample collection? (yes/no) \_\_\_\_\_\_\_
   7. Use samples that will be obtained prospectively from animals that will be euthanized for an unrelated study prior to sample collection? (yes/no) \_\_\_\_\_\_\_
   8. Use samples that will be obtained from animals that will be euthanized for the proposed study prior to sample collection? (yes/no) \_\_\_\_\_\_\_
   9. Use immortalized cell lines? (yes/no) \_\_\_\_\_\_\_
   10. Use samples obtained from a third-party vendor (yes/no) \_\_\_\_\_\_\_

**SECTION 2: If you answered yes to any of the above, this section must be filled out in its entirety**

1. Describe, in detail, all animal involvement proposed in this study. This includes all live animal involvement (including client-owned animals), retrospective live animal involvement for sample collection and prospective live animal involvement for sample collection.
2. If this study involves archived samples describe, in detail, the nature and origin of all proposed archived samples to be used. This includes primary cell and immortalized cell lines.
3. List the [USDA category](https://www.morrisanimalfoundation.org/sites/default/files/files/2018-12/USDA-Pain-and-Distress-Categories.pdf) (B, C, D, E) for pain and distress. This includes the USDA category pertaining to previous animal involvement, which yielded archived sample collection:

**Attention: “N/A” will not suffice as a selection.**

1. State the status of your IACUC approval. If approval is pending or if IACUC approval is exempt, please explain.

Note: The entire IACUC protocol and approval letter will be required before funding can be awarded. If biological or archived samples will be utilized, IACUC approval for original sample collection, or a letter stating that the study was exempt, will also be required.

1. Describe how all animals included in the study will be acquired (e.g., client-owned, USDA licensed breeder, institutional “herds” or “colonies”, etc.). This includes describing how all animals were acquired for retrospective samples and/or will be acquired for prospective sample collection.
2. Does this study involve client-owned animals, retrospectively or prospectively (yes/no)?

**If yes,** an informed client consent form must be attached to this proposal.

1. Describe how many animals will be included in this study. If more than one species, please explain.
2. Summarize the numerical justification of animals included in this study.
3. Describe how all procedures with animals will be conducted with appropriate consideration of animal welfare, including the use of anesthesia or analgesia, humane handling techniques and best veterinary practices. This includes procedures with client-owned animals and animals which occurred retrospectively during sample collection.
4. Describe the environment and housing conditions (quality of life) in which animals will live throughout the duration of the study (species-appropriate exercise, enrichment, socialization, veterinary care, etc.). This includes client-owned animals and animals that were retrospectively utilized during sample collection.
5. Describe what will happen to all animals upon completion of the proposed study. If adoption, explain the adoption plan. If other, justify the proposed plan for all animals involved. This includes animals that were retrospectively utilized during sample collection.
6. Does this study induce or have the potential to induce disease, injury, pain or distress in animals (yes/no)?

Does this study involve samples that were originally acquired as part of a study that induced or had the potential to induce disease, injury, pain or distress in animals (yes/no)?

**If yes to either above,**

1. Defend the necessity of the aspects of the experimental design that may induce disease, injury, pain or distress.
2. Explain how pain and/or distress will be (or was) controlled.
3. Justify that no alternative, including clinical studies, can be used to accomplish study objectives.
4. Weigh the potential benefits of this study (ie. the fact that the disease/condition to be studied is of such significance for improving the health of the species) against the potential harms to the animals enrolled in this study.
5. Is euthanasia a possible outcome in this proposed study (yes/no)?

If this study involves analysis of archived samples, was euthanasia an outcome when samples were originally acquired (yes/no)?

**If yes to either above,**

1. State and justify the total number of animals that will be or were euthanized.
2. Describe the method of euthanasia.
3. Provide justification that no alternatives can be used to accomplish study goal(s).
4. Weigh the potential benefits of this study (ie. the fact that the disease/condition to be studied is of such significance for improving the health of the species) against the need for a terminal endpoint in this study.
5. Provide detailed objective criteria for determining when euthanasia is appropriate or necessary.
6. **Recombinant DNA/Biohazards** (no page limit)
7. **Facilities and Equipment** (one-page limit)
8. **Cited References** (one-page limit)
9. **Budget** (one-page limit) Include annual subtotals, calculated indirect costs and grand totals in all applicable fields. All funds must be U.S. dollars.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Category** | **Year 1** | **Year 2** | **Year 3** | **Total** |
| **Personnel:**   1. **Principal investigator (name)** 2. **Co-investigator #1 (name)** 3. **Co-investigator #2 (name)** 4. **Technician**   Salary (X%)  Fringe Benefits (Y%)   1. **Student**   Salary (X%)  Fringe Benefits (Y%)   1. **Fellowship Training Grants**   Salary (X%)  Fringe Benefits (Y%)    **Total Salaries & Wages** | $0  $0  $0  $0 | $0  $0  $0  $0 | $0  $0  $0  $0 | $0  $0  $0  $0 |
| **Supplies, Equipment, Travel & Other Expenses:**           **Total Supplies, Equipment, Travel & Other Expenses** | $0 | $0 | $0 | $0 |
| **Animal Use & Care:**   1. **Animal Purchase** 2. **Animal Per diem**     **Total Animal Care** | $0 | $0 | $0 | $0 |
| **Subtotal of All Categories** | $0 | $0 | $0 | $0 |
| **Grand Total Requested from MAF** | $0 | $0 | $0 | $0 |

1. **Itemized Budget Justification** (one-page limit)
2. **Current and Pending Support** (no page limit)
3. **Biographical Data** (two-page limit per individual)
4. **Letters of Support**