*Applicant instructions:*

* *Use this template to organize your submission. The form works better on the app version rather than web version of Word.*
* *The order of the research proposal must follow the order in the template.*
* *Do not delete headings or questions.*
* *Use no smaller than Aptos 10.5-point font, lines single-spaced or greater with a minimum of ¾ inch margins.*
* *Define technical terminology on first usage; acronyms and abbreviations may be used subsequently.*
* *These applicant instructions may be deleted prior to proposal submission.*
1. **Study Proposal** (page limit as per guideline instructions)
	1. **Hypothesis and Objectives**
	2. **Problem Description and Significance**
	3. **Study Design and Methods**
	4. **Possible Risks, and Mitigation Plans**

**B. Resubmission Summary** (3-page limit excluding copy of original review)

**C. Animal Health Impact: Questions in this section address scientific impact, non-academic impact, and engagement activities.**

1. **What taxa would benefit from your research? (select all that apply)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **​​**[ ] **​ Canine** | **​​**[ ] **​ Equid** | **​​**[ ]  **Reptiles** | **​​**[ ] **​ Avian** | **​​**[ ]  **Invertebrates** |
| **​​**[ ]  **Feline** | **​​**[ ] **​ Amphibian** | **​​**[ ] **​ Mammalian Wildlife** | **​​**[ ] **​Fish** | **​​**[ ] **​ Humans** |

1. **Where are you collecting your samples? (select all that apply)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| [ ]  **Local** | **​​**[ ]  **Regional** | **​​**[ ]  **Tribal** | **​​**[ ]  **National** | **​​**[ ] **​ Global** |

1. **What is the scale of impact (select all that apply and optional text box)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **​**[ ] **​ Local** | **​​**[ ] **​ Regional** | **​​**[ ] **​ Tribal** | **​​**[ ] **​ National** | **​​**[ ] **​ Global** |

**Please elaborate if your scale of impact is greater than the location where you are collecting samples.**

|  |
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1. **What area(s) of impact are you hoping to achieve? (multi-select)**

|  |  |  |  |
| --- | --- | --- | --- |
| **​​**[ ] **​ Genetic Markers** | **​​**[ ] **​ Disease Prevention** | **​​**[ ] **​ Species Biobank/Genetic Rescue** | **​​**[ ] **​ Welfare/ Behavior** |
| **​​**[ ] **​ Diagnostic Development** | **​​**[ ]  **Vaccine Development** | **​​**[ ]  **Species Conservation/Management Improvement** | **​​**[ ] **​General Health/Aging** |
| **​​**[ ] **​ One Health** | **​​**[ ]  **Treatment** | **​​**[ ] **​ Disease Biology/Pathogenesis** | **​​**[ ]  **Other** |

**If other, please provide details:**

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1. **What are your projected impact outcomes of this study? (multi-select and text box). Check all boxes that your research supports or addresses.**

|  |  |  |
| --- | --- | --- |
| [ ]  **Improve accessibility of care i.e. increased affordability, ease of access** | **​​**[ ]  **Provide professional development to newer investigators or build capacity** | **​​**[ ] **​ Translate findings or developments from researchers to veterinary clinic/in-field practice** |
| **​​**[ ] **​ Develop new treatment options** | **​​**[ ]  **Lead to policy action** | **​​**[ ] **​ Increase general public awareness** |
| **​​**[ ]  **Develop new diagnostic test** | **​​**[ ] **​ Translate findings to human medicine** | **​​**[ ]  **Conserve species** |
| **​​**[ ]  **Address a critical gap in scientific knowledge** | **​​**[ ]  **Improve general animal health, welfare or longevity** | **​​**[ ] **​ Other** |

**In the text box below, please provide details about your expected impact. Appropriate topics may include:**

* **How the work is integral to the health, welfare or longevity of the animal/species. If measuring animal health, be sure to define health, how it is measured and why, and the impact of the research on animal health as defined in your application.**
* **Likelihood of the project to make a rapid contribution to solving a problem or addressing a key knowledge deficit that is obstructing progress.**
* **Likelihood that the findings will have an impact beyond the period of this award.**
* **The potential for wider impact e.g., for other scientific fields, animal populations, species, or geographic regions.**
* **The extended impact this work (or subsequent work) may have on One Health, the environment, policy, human behavior, industry, economics, or public awareness, if applicable.**

**Text Box:**

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1. **In 3-5 sentences, how will you know if the outcome(s) of the study have been achieved?**

**Text Box:**

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1. **Please list stakeholders associated with this project. How are they involved and how will they contribute to the impact of this project? Engagement beyond academic/scientific communities will substantially strengthen your proposal.Suggested items to address within the response include:**
* **Who is interested and who might benefit from this project.**
* **The needs of these stakeholders and how they were identified.**
* **Who will be engaged with and how, including any establishment with policy makers. Include letters of support if applicable.**
* **Stakeholder involvement in project design, execution, preparation of training, and/or dissemination of results, and if they are included as collaborators.**

**Text Box:**

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1. **How will you disseminate the results of your findings? (multi-select and text box).**

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| --- | --- | --- | --- |
| **​​☐​ Direct Communication or mentorship (1:1 or 1:few)** | **​​☐​ Symposia or presentations aimed at non-scientific audience (i.e. pet guardians or community members)** | **​​☐​ Symposia or presentations aimed at clinical or practicing veterinarians** | **​​☐​ Other Media: print educational resources, digital educational resources, film, podcast, etc.** |
| **​​☐​ Larger training courses (in person or virtual)** | **​​☐​ Peer reviewed manuscript** | **​​☐​ Discussions with policy makers** | **​​☐​ Social Media (posts, blogs, discussion forums, etc.** |
| **​​☐​ Scientific conferences** | **​​☐​ Lay publications** | **​​☐​ Other** |  |

**Please provide details. Engagement beyond academic/scientific communities will substantially strengthen your proposal.**

**Suggested items to address in this response include:**

* **Outline your engagement activities and outputs plan (i.e., knowledge exchange activities).**
* **What time and effort will be committed to these activities?**
* **Who do you propose to engage with and how? Include letters of support if applicable.**
* **What experience do the applicants have with non-academic engagement, and/or what training or other resources are available for knowledge dissemination.**

**Text Box:**

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**How will you track and evaluate the success of your engagement activities?**

**Text Box:**

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**D. 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.

 *e.g., case-control, randomized control trial*

Sample type: Click here to enter text.

 *e.g., a single group, two or more independent groups, matched pairs*

Analytic approach: Click here to enter text.

*e.g., t-test, logistic regression, non-parametric analysis*

Statistical test:

*e.g., 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.

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**E. Animal Involvement Justification Form (AIJ)**

Morris Animal Foundation (MAF) is dedicated to funding scientifically sound, relevant, and humane studies that improve the health and well-being of animals.All studies receiving funding must adhere to [MAF’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 MAF funded health study receives excellent, compassionate care throughout the study. Please review MAF’s Health Study Policy prior to filling out this form.There is a need to demonstrate that researchers have considered animal welfare and sentience at every step of the research process.

All proposals that are recommended for funding by the relevant Scientific Advisory Board (SAB) will be reviewed by the Foundation’s Animal Welfare Advisory Board (AWAB) for adherence to the Health Study Policy. Please provide sufficient detail that will enable AWAB to fully understand animal involvement throughout the study. If insufficient information is provided, the proposal will be sent back to the applicant with requests for further details. **The proposal must obtain AWAB approval to receive funding.**  Proposals describing studies deemed to fall below the animal welfare and ethical standards of Morris Animal Foundation, even if approved by the author’s institutional animal care and use committee (IACUC), are not acceptable and subject to rejection.

**Note: This form must be completed in its entirety at the time of submission. Incomplete forms and any missing required attached documents may result in disqualification of the proposal.** Please translate any attached documents into English where relevant.

1. Areyou **only** using Golden Retriever Lifetime Study (the Study) samples and data? Check no if you are using any data outside of the Study, including archived or prospective samples.

|  |  |
| --- | --- |
|  [ ]  Yes If yes, please proceed to Section F and do not complete this AIJ Section.  |  [ ]  No If no, you must complete the entire AIJ section  |

1. Will live animals be involved at any time during this study? This includes animal observation and non-invasively collected samples (i.e. freshly defecated fecal) OR samples being collected prospectively for use in THIS study, even if being done at another site/facility.

|  |  |
| --- | --- |
|  [ ]  Yes |  [ ]  No If no, please proceed to Question #3.  |

* 1. If not already discussed in Methods, please explain or elaborate upon procedures or treatments that animals will undergo during the course of the study. Describe, in detail, how any procedures that have the potential to cause stress, pain, injury, or disease, will be addressed to optimize animal welfare, taking into consideration analgesia, anesthesia, low-stress handling, and best veterinary practices.

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* 1. If this study induces or has the potential to induce disease, injury, pain, or distress in animals, justify that no alternative can be used to accomplish study objectives.

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* 1. Does this study involve institutionally-owned-or organization-owned animals (Note that this includes samples purchased from a 3rd party vendor)?

|  |  |
| --- | --- |
| [ ]  Yes |  [ ]  No If no, please proceed to Question #2d. |

* + 1. Please describe the environment and housing conditions in which they will live throughout the duration of the study, including enrichment, socialization, exercise, veterinary care, etc.  Please provide concrete information; noting specific accreditation (e.g. AAALAC, ILAR) only will not constitute adequate information.

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* + 1. Please describe any previous animal use for the proposed study animals within the past 12 months, if any.

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* 1. Please explain or elaborate upon expected outcomes for the animals involved in the proposed study. In other words, explain what happens to each animal at the end of this study.

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* 1. Does this study involve client-owned animals?

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| --- | --- |
| [ ]  Yes | [ ]  No If no, please proceed to Question #2f. |

* + 1. If yes, please describe how informed client consent will be obtained.

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* + 1. If yes, use these [Informed Client Consent Form guidelines](https://www.morrisanimalfoundation.org/sites/default/files/filesync/Informed-Client-Consent-Form-Guidelines.pdf) to develop your Client Consent Form. [This optional template may be used.](https://www.morrisanimalfoundation.org/sites/default/files/filesync/Optional_MAF-Informed-Consent-Template.docx) **Attach a copy of the client consent form** to this proposal.   NOTE: lack of attaching client consent form will render this form incomplete.

|  |
| --- |
|  [ ]  Consent form is attached.  |

* 1. For observational or non-invasive sample collection studies please outline potential impacts to the animals in question and how these impacts will be mitigated.

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* 1. Morris Animal Foundation considers euthanasia acceptable when an animal develops unanticipated illness or injury that results in pain and suffering that cannot be alleviated with standard veterinary interventions. Please describe your protocol should this occur.

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3. Does this study use (1) previously collected archived samples, (2) immortalized cell lines, or (3) samples obtained opportunistically from animals that die or are euthanized for reasons unrelated to the current study?

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| --- | --- |
|  [ ]  Yes | [ ]  No If no, please proceed to Question #4. |

1. If yes, please elaborate on the source of the samples and under what conditions they were obtained, (e.g., during diagnostics, treatment, euthanasia).

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1. Were samples collected from client-owned animals?

|  |  |
| --- | --- |
|  [ ]  Yes | [ ]  No If no, please proceed to Question #3c. |

1. If yes, **please attach a copy of the client consent form** to this proposal. This may be a copy of the hospital admission form demonstrating consent for use of surplus samples.

|  |
| --- |
|  [ ]  Consent form is attached.  |

1. If the origin of samples and the animal welfare considerations at the time of collection is uncertain, please justify the importance of using these samples or cell lines.

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4. Is this study data-based involving a retrospective review of records, a survey-questionnaire, or something similar?

|  |  |
| --- | --- |
| [ ]  Yes | [ ]  No If no, please proceed to Question #5. |

1. If yes, please indicate your facility’s Institutional Review Board (IRB) review process and when consideration will be sought for this study. Please note that documentation of approval or consideration and exemption will be required before funding can be awarded.

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|   |

5. Describe the potential benefits of this study (i.e. the fact that the disease/condition to be studied is of such significance for improving the health of the species) weighed against the potential harms to the animals involved in this study. Please note MAF’s new statement on animal sentience and take this into account in your answer.

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6. List the [USDA category](https://www.aphis.usda.gov/sites/default/files/ac-tech-note-categorizing-animal-pain-or-distress.pdf) (B, C, D, E) for pain and distress. This [link](https://www.morrisanimalfoundation.org/sites/default/files/filesync/USDA-Pain-and-Distress-Categories.pdf) provides guidance and examples to select the correct USDA category. For studies using archived samples please select the USDA category pertaining to previous animal involvement, which yielded sample collection. If multiple USDA pain and distress categories apply to a study, select the highest pain or distress category experienced during the study period. **Attention: “N/A” will not suffice as a selection.**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| [ ]  B | [ ]  C | [ ]  D | [ ]  E |  [ ]  Data Only, No Animal Involvement |

|  |
| --- |
| Optional Text Box:  |

7. State the status of your IACUC or other welfare/ethics committee approval or exemption (pending, finalized, not submitted, etc.). Please note that all documents (IACUC protocol and approval, documentation of IACUC exemption) will be required before funding can be awarded. If biological or archived samples will be utilized, documentation of IACUC approval/exemption will also be required.

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8. For wildlife studies, please list any required government or agency permits and their approval status. Please note that copies of all permits will be required before funding can be awarded. If biological or archived samples will be utilized, documentation of any relevant permits for original sample collection, will also be required. Please translate documents into English where relevant.

|  |
| --- |
|  [ ]  Not Applicable If applicable, enter list: |

​​     ​

**F. Recombinant DNA / Biohazards / Biosecurity Measures** (no page limit)

**G. Facilities and Equipment** (1-page limit)

**H. Cited references** (page limit as per guidelines) in AMA style.

**I. Complete and upload budget using the provided** [**Excel Budget Template**](https://www.morrisanimalfoundation.org/sites/default/files/filesync/Budget-Template.xlsx)**.**

**J. Budget justification and timeline summary** (2-page limit) [**Budget Justification Information**](https://www.morrisanimalfoundation.org/sites/default/files/filesync/Budget-Justification-Template.docx)

**Project Timeline**

|  |  |
| --- | --- |
| **Objective or Task** | **\*Timing (grant month/year)** |
|  |  |
|  |  |
|  |  |
|  |  |
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**\*Month 1 = first month following contract signature**

**K. Current and Pending Support** (no page limit)

i. Project ID, Funding Source, Start and End Date of Award:

ii. Project Title:

iii Summary:

iv. Overlap:

**L. Biographical Data** (2-page limit per individual) include a bio-sketch for the PI and mentors. This might take the form of a resume/CV.

i. Name, Role on this Project

ii. Current Position (title, institutional affiliation, institutional address)

iii. Education and Training (degrees, institution, year completed, areas of emphasis)

iv. Previous Positions, Honors, Awards, Committee Assignments

v. Selected Peer-reviewed Publications (include titles, all authors, and complete reference)

**M. Supporting Documents**: Mentor letter(s) and Department Head Letter are to be uploaded by each individual using the American Institute of Biological Sciences SCORES portal. **Candidate Letter of Intent (required)** and other Letters of Support can be included in the main proposal attachment at the end of this document.

**N.** **Training Plan**

**O. Salary Verification**

**P. Unofficial Educational Transcripts**: Transcripts must be provided in English