

PROPOSAL GUIDELINES

Donor-Inspired Study: Canine Osteosarcoma

PROGRAM SUMMARY

The mission of Morris Animal Foundation is to bridge science and resources to advance the health of animals. To achieve this aim, we fund hypothesis-driven, humane research projects with high scientific merit and the potential for significant impact. Our donors are interested in funding research that results in impactful animal health achievements and benefits both scientific and non-scientific stakeholders including veterinarians, pet owners, communities, and the environment.

This donor-funded Request for Proposals is focused on canine osteosarcoma, the most common primary bone tumor diagnosed in dogs. **We are pleased to announce we are accepting Established Investigator, Pilot Study and First Award proposals for the study of canine osteosarcoma.** Of particular interest are studies that focus on new treatment approaches, but all proposals that seek to advance canine osteosarcoma research are encouraged.

Proposals that use data and/or specimens from the Foundation's Golden Retriever Lifetime Study are also encouraged. The Foundation's Golden Retriever Lifetime Study is a longitudinal cohort study that began in 2012 and includes 3,044 purebred golden retrievers. The Study was designed to enable research into the incidence and risk factors for cancer and other diseases, and has accrued a large biorepository and extensive data. Information about Study specimens and data can be found here: [Golden Retriever Lifetime Study RFP | Morris Animal Foundation](#).

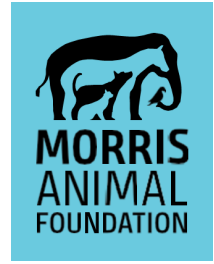
If you propose to use Golden Retriever Lifetime Study samples in your research, please complete and send [this form](#) to datateam@morrisanimalfoundation.org **prior to writing your grant proposal** to ensure adequate sample type(s) and volume are available for your research. Proposals including a sample request in which the PI has not coordinated ahead of time through use of [this form](#) may result in the proposal being declined.

APPLICANT QUALIFICATIONS

Established Investigator Applicants: Competitive applicants will have a record of research expertise demonstrated through peer-reviewed publications.

Pilot Study: Pilot Study awards provide funding for proof-of-concept studies in animal health research.

First Award: First Award grants are designed to assist early career researchers in establishing a successful research program by supporting their first award as an independent



investigator. The applicant must have completed a PhD, DVSc, DVM, or equivalent degree and have a permanent position in a university, accredited zoo, conservation organization, or a non-academic equivalent. Principal Investigators should have a history of research publication as a Co-PI or Co-Investigator. Individuals currently in a residency program are not eligible. Postdoctoral researchers should be completing their program and proposing research intended to be conducted in a permanent position. Applicants must not have received previous funding of more than \$25,000 for any single extramural award as a principal investigator leading independent research. Applicants are eligible to apply if they have received funding during training or education such as the National Science Foundation's Graduate Research Fellowship Program or the Morris Animal Foundation's Fellowship Training grant. The applicant should clearly describe prior funding in the candidate's letter of intent. Previous funding as a co-investigator is acceptable. This application requires supporting statements from one or more appropriately experienced mentors.

All Applicants: All applications for this award must convince the scientific and animal welfare reviewers that they clearly understand the health problem, have sufficient expertise to conduct the study, are using a scientifically sound approach, and have given appropriate consideration to the overall environmental and animal welfare impact of their research. A maximum of one application as Principal Investigator (PI) is permitted.

AWARD DURATION AND BUDGET LIMITS

The maximum duration of an Established Investigator Award is 36 months. There is no limit to the budget request, however we expect the average award to be approximately \$100,000

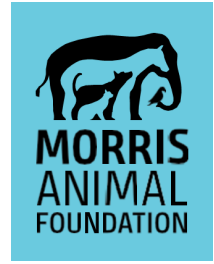
The maximum duration of a Pilot Study Award is 12 months, and the total budget cannot exceed \$20,000.

The maximum duration of a First Award is 24 months, and the total budget cannot exceed \$120,000.

For awards that allow projects of more than one year, the applicant can allocate costs as appropriate. Costs do not have to be evenly spread across the lifetime of the project. Applicants are not required to use the maximum award duration.

MORRIS ANIMAL FOUNDATION POLICIES

Health Study Policy: Projects must adhere to the Foundation's [Health Study Policy for Animals Involved in Research](#). Morris Animal Foundation will not fund projects that include euthanasia of animals for research purposes. All Foundation-funded research must demonstrate consideration of animal sentience and full regard to animals' physical and psychological needs and welfare in the study design. Proposals recommended for funding by scientific reviewers are reviewed separately and must be approved by animal welfare and ethics experts prior to funding.



Office of Foreign Assets (OFAC) Disclaimer: The Foundation is committed to full compliance with U.S laws and regulations establishing trade and economic sanctions. The Foundation will not fund any proposal where individuals, activities, or financial transactions occur within Cuba, Iran, North Korea, Syria, or the Crimea Region of the Ukraine. In addition, all individuals and entities involved in the proposal must not be sanctioned under U.S. trade and economic laws or regulations. You can learn more about sanctioned countries, entities, and individuals at [this link](#).

Parachute Science: Projects that include international collaborations should address international scientific engagement and benefits and **must** include a named Principal Investigator, Co-Investigator, or Mentor in the country where the research will occur. The Foundation endeavors to achieve our objectives through ethical pathways and with the clear intention of inclusivity, diversity, and the elimination of the practice of parachute/colonial science.

Progress Reports: If you are the PI or a Co-PI on an active Morris Animal Foundation grant award, all progress reports and other contractual obligations must be current.

Failure to adhere to the above policies may result in your proposal being declined. For questions about Morris Animal Foundation Policies that are not answered within the proposal guidelines or our [FAQ page](#), contact grantapplications@morrisanimalfoundation.org.

REVIEW PROCESS

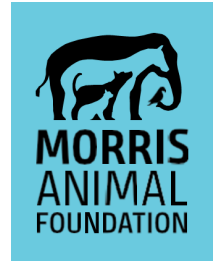
All proposals will undergo administrative and scientific review. Each proposal is assigned to two scientific reviewers and is ultimately scored by the Scientific Advisory Board (SAB) according to [this rubric](#). Projects recommended for funding are then screened by our Animal Welfare Advisory Board (AWAB) for adherence to our [Health Study Policy for Animals Involved in Research](#). Any animal welfare questions or concerns must be addressed before a proposal is eligible for funding.

PROPOSAL FORMAT, GUIDELINES AND SUBMISSION INSTRUCTIONS

Carefully review and adhere to these proposal guidelines, including page length. Deviations from these guidelines may result in the rejection of your proposal.

Fluxx Submission Instructions:

Submit applications in [Fluxx](#) . The application process includes completion of the online form and proposal attachment. Both the PI and the individual submitting the application (if different from the PI) must create an account before applying for funding. If you would like a Mentor, Financial Officer, or other Authorized User to have access to your application, future reports, and payment information, they also need to have registered accounts in Fluxx. All



new accounts 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 [Fluxx Applicant User Guide](#).

Your application must be received by 4:59 p.m. Eastern Time on the designated due date.

Proposal Format:

Use [this proposal template](#) to complete your proposal. Do not remove any headers or sections. Indicate “not applicable” if a section or question does not apply.

The order of the research proposal must follow the order in the template. Proposals should be single-spaced or greater, using no smaller than Times New Roman 11-point font with a minimum of ¾ inch margins. Technical terminology should be defined on first usage; acronyms and abbreviations may be used subsequently. The complete proposal, including attachments, must be converted to a single PDF prior to submission.

Proposal Outline:

- A. Lay Summary** (2,000-character limit): This information may be used in communications with the public to showcase your project. Lay language should be used, and we require a Flesch Reading Ease Score of 50-70. Paste your lay language summary into this [free readability checker](#) to verify the reading level. **This should not be a duplicate of the technical summary (below).**
- B. Technical Summary** (2,000-character limit): For review by Foundation staff and the Scientific & Animal Welfare Advisory Boards.
- C. Title Page** (1-page limit): Include the proposal title and the name, institution and email address of the PI and all Co-PIs, Co-IS or Mentors. A named Co-Investigator and/or Mentor serving as the in-country collaborator is required when the PI is not located in the country where research will occur.
- D. Study Proposal** (5-page limit including figures, tables and sub-sections i. - iv. below): Note that “not applicable” is not a sufficient response in this section.
 - i. Hypothesis and Objectives:** Be precise and enumerate specific, testable hypotheses with realistic objectives to be achieved within the timeline and budget of the proposal.
 - ii. Problem Description and Significance:** Include a brief literature summary and preliminary data (if applicable) that describes the current state of the problem and justifies the need for the proposed study/proof-of-concept study. If the PI is conducting research outside of their country of institutional affiliation, they must clearly stipulate how the information gained from their study will be used by stakeholder groups locally.

Preliminary Data: Succinctly describe any previous results by the investigator which supports the proposed research. If this project is a continuation of a previous Morris Animal Foundation study, include grant ID number, title, and a brief summary of the final results. Preliminary data is not required for Pilot Studies but should be included if available and relevant.

- iii. **Study Design and Methods:** Include the experimental design and methods for each objective. Data analysis methods must also be described.
- iv. **Possible Risks and Mitigation Plans:** Identify and address any potential shortcomings of the design and methods, or potential operational challenges.

E. Animal Health Impact [[Example Animal Health Impact Statement](#)] (no page limit): Impact is vitally important to our donor-supported organization. We may decline proposals where impact is incompletely addressed, particularly those lacking in impact beyond the scientific community. Scientifically, robust studies in which non-academic and broader impact are integral to the study design will have the highest chance of success. Remember that the scoring rubric allocates a third of the points available to impact and engagement. **Well written proposals will consider the following questions:**

Scientific impact, including impact beyond this research field. Key questions include:

- How is this work integral to the health, welfare or longevity of the animal/species?
- Is this project likely to make a rapid contribution to solving a problem or addressing a key knowledge deficit that is obstructing progress?
- How likely is it that the findings will have an impact beyond the period of this award?
- Is there potential for wider impact e.g., for other scientific fields, animal populations, species, or geographic regions?

Non-academic impact, including stakeholders and beneficiaries. Key questions include:

- Who might be interested and who might benefit from this project?
- What are the needs of these stakeholders and how were they identified?
- Will stakeholders be involved in project design, execution, preparation of training, and/or dissemination of results? Have any been included as applicants?
- If applicable, describe 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, have connections with policy makers been established? Outline your engagement activities and outputs plan (i.e. knowledge exchange activities).

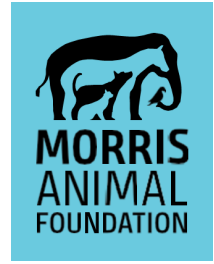
Engagement beyond academic/scientific communities will substantially strengthen your proposal. Key questions include:

- What time and effort will be committed to these activities? Please include in the budget and timeline below if appropriate (section L).
- Who do you propose to engage with and how? Include letters of support if applicable.
- How will the success of engagement activities be tracked and evaluated?
- What experience do the applicants have with non-academic engagement, and/or what training or other resources are available for knowledge dissemination?

- F. Sample Size Calculation** (no page limit): Use the Sample Size Form in the proposal template as applicable.
- G. Animal Involvement Justification (AIJ) Form** (no page limit): Complete the entire AIJ form in the proposal template, regardless of live animal involvement. **This form is required.**
- Client Consent Form [Use for Domesticated species]:** If your study involves client owned animals, attach your Client Consent Form following the AIJ form.
- H. Recombinant DNA/Biohazards/Biosecurity Measures** (no page limit): Applicants using recombinant DNA techniques must confirm that they have complied with [National Institutes of Health guidelines](#) and have approval from their institution's Biological Safety Committee to conduct the proposed research if it is funded. Indicate any other potential biosafety concerns, including the use of radiation. Describe biosecurity measures that will be put in place to protect animals and people from transmissible disease and biological agents.
- I. Facilities and Equipment** (1-page limit): Describe facilities and equipment available to conduct the proposed research. Include resources available at the PI's institution and sub-contracted or fee-for-service resources needed to complete the research.
- J. Cited References** (2-page limit): Include complete citations referenced numerically in the body of the proposal.
- K. Instructions for Budget** (1-page limit): The budget is uploaded separately from the main proposal using the provided [Excel budget template](#). The maximum project durations and budgets are noted in *Award Duration and Budget Limits*, above. The Foundation will allow a maximum of 8% indirect costs (if charged by your institution). Note that the allowable budget total is the total of direct and indirect costs.
- Personnel:** You must document the salary and role of personnel in two places. (1) In the Excel budget template, include the requested information for all personnel regardless of whether you are requesting salary support. (2) In the budget justification section template, please provide justification for any salary requests **and** provide

information about the personnel's time commitment and role regardless of whether salary support is requested.

2. **Salary:** In the Excel budget template, include each person's name, role, and time spent on the project as "% project appointment" regardless of whether you are requesting salary support. If you are requesting salary support, include the amount in the year columns. Enter zero in the year columns if you are not requesting salary support. Also include the fringe benefit rate for each person for whom salary is requested. The Excel template will calculate total personnel costs.
 - 2.1. **Key Personnel: The Principal Investigator and Co-Investigators must commit time to the research project.** Salary requests for time spent on the project must be clearly defined in the budget justification section below and should include % appointment to the proposed project. As we are an international funder, we expect the nature of these positions to be clearly described to aid review.
 - 2.2. **Technicians, Residents, Fellows, and Students:** Salary requests are permitted but must be clearly defined and include % time commitment.
 - 2.3. **For Profit Institutions:** The Foundation does not fund salary support for staff of for-profit institutions.
3. **Tuition:** Morris Animal Foundation does not pay for tuition.
4. **Equipment:** Requests for equipment purchase may not exceed \$5,000 for the lifetime of the project. Equipment are long term assets as opposed to services or supplies which are consumable.
5. **Other Project Expenses:** Briefly categorize other project expenses e.g., laboratory or clinical consumables; reagents; non-equipment study supplies; and service fees for specimen analysis.
6. **Travel:** Requests for travel to scientific meetings and conferences must be well-justified in terms of scientific impact and should not exceed \$2,000 total. Travel needed to complete research objectives should be budgeted separately. Travel must be essential; resources or activities that provide alternatives are preferred. For international project teams, activities should be conducted wherever possible by teams and/or collaborators already in-country.
7. **Increasing Impact and Open Access Publications:** The Foundation encourages PIs to budget for strategies to optimize research impact. Your project budget may include funds to publish findings in an open access journal. Strategies to optimize impact of the project should be described in the budget justification section.
8. **Indirect Costs:** Up to 8% of the budget's total direct costs can be applied to indirect costs if your institution charges for these costs. The addition of indirect costs should not result in the total exceeding the maximum allowable budget. If a subaward to another organization is proposed, the total indirect costs may not exceed 8% for the subaward. We encourage provision of indirect costs as in-kind from your institution whenever possible.
9. **Altering the Excel Budget Template:** The format of the Excel Budget Template is fixed to ensure consistency. You will not be able to add additional lines. If you need additional room, please combine similar items within the budget template and provide detailed information in the budget justification. For example, you can enter



“consumables” in the Excel budget template and then include a detailed list in the justification section of the proposal template.

- ✓ Once completed, upload Excel budget spreadsheet into the Document section in Fluxx. This will be a separate upload from the rest of the proposal template.

L. Budget Justification and Timeline Summary (2-page limit): [[Find additional details about the budget justification here.](#)] Use the budget justification section in the proposal template. For all key personnel, include % amount of time allocated, a description of their role, and the salary requested in the budget, if applicable. Use the project timeline to demonstrate how the research objectives will be completed in the timeframe requested. Please include data analysis time and manuscript preparation time.

M. Current and Pending Support (no page limit): Identify all active or pending support for the PI and Co-Investigators. Where scientific or budgetary overlap, may be perceived, please explain. Provide the following information for all current and pending support.

- Project ID, Funding Source, Start and End Date of Award**
- Project Title**
- Summary:** Summarize project objectives and results to date
- Overlap:** Summarize any potential overlap with the proposed project regarding the science, budget, or committed effort.

MI. Biographical Data (2-page limit per person): Include a bio-sketch for each PI and Co-Investigator with the following information. This might take the form of a resume/CV.

- Name, Role on this Project**
- Current Position** (title, institutional affiliation, institutional address)
- Education and Training** (degrees, institution, year completed, areas of emphasis)
- Previous Positions, Honors, Awards, Committee Assignments**
- Selected Peer-reviewed Publications** (include titles, all authors, and complete reference)

MI. Letters of Support: Include a letter of support from any collaborator, funding agency, policymaker, or commercial partner whose contributions are required to achieve the research objectives described in the proposal. **A letter of support from the named Co-I or mentor serving as the in-country collaborator is required when the PI is not located in the country where the research or a portion of the research will occur. For First Award applicants, include a candidate letter of intent, mentor letter(s) and a letter of support from your department head or equivalent.** Indicate the letters of support that you will be adding (i.e., one letter from my head of department, two from collaborators etc.), convert these to PDF format and combine with the template PDF for upload as a single file.

- ✓ Once completed, convert word files to a PDF and combine all documents into a single PDF for upload. **Excluding the Excel budget spreadsheet which will be uploaded separately*

APPLICATION CHECKLIST

Ready to submit? Please review this Applicant Checklist to double check your grant proposal and maximize your chance of success prior to clicking 'Submit'. This checklist should not be uploaded as part of your application.

- Account created in [Fluxx](#); allow 2 business days for account activation
- Lay Language summary has a [Flesch Reading Ease Score](#) of 50-70
- Study Proposal length conforms to proposal guidelines allowable length
- Animal Health Impact Section completed and adequately addresses questions within the proposal guidelines
- Fully completed Animal Involvement Justification Form
- Client Consent form provided (*if applicable*)
- Permits (*if applicable*)
- Budget and budget category totals are within allowable request, and the budget template provided is used (link to the template is provided in guidelines and proposal template)
- Letters of support (*if applicable*)
- All proposal template sections are completed
- All documents provided in English
- Application submitted as 1 full proposal document in PDF format + 1 budget spreadsheet in Excel format (2 files total)

For applicant questions not answered by the proposal guidelines or in the [Grants FAQ](#), please reach out to the Scientific Grants Program Team at grantapplications@morrisanimalfoundation.org