



GUIDELINES FOR ESTABLISHED INVESTIGATOR, FIRST AND PILOT STUDY AWARDS

Request for Proposals: Feline dental disease, cognitive dysfunction syndrome, behavior, shelter medicine and cancer.

PROGRAM SUMMARY

The mission of Morris Animal Foundation is to bridge science and resources to advance the health of animals. We have a particular focus on the top issues facing primary-care veterinary practitioners. To achieve this aim, we fund hypothesis-driven, humane research projects with high scientific merit and the potential for significant impact. We are a non-profit organization that is funded by public support from individuals, corporations, clubs, and foundations, and by earnings from our endowed funds. 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.

For this grant call proposals must address one or more of the following topics and stated areas of interest:

Dental Disease

- Pathophysiology of tooth resorption
- Effects of crown extraction for cats with tooth resorption, in particular the nature of tissue that might be left behind in such a procedure. For this topic, we require the involvement of dental specialists
- Pathophysiology of juvenile onset periodontal disease

Cognitive Dysfunction Syndrome

- Methods of defining and differentiating this condition
- Pathophysiology including neuropathology

Behavior

We will accept any research focused on improving the health and welfare of cats by increasing our understanding of the behavioral domain; projects with translational potential are of particular interest. Projects must address behavioral hypotheses. Involvement of one or more animal welfare scientists is preferred (as a principal or co-investigator).

Shelter Medicine

All studies must focus on the health and welfare of shelter cats themselves, with the aim of direct benefits for individual animals and their populations. Well-defined welfare indicators should be employed in monitoring cats involved in these studies, and inclusion of one or more animal welfare scientists is preferred (as a principal or co-investigator). Any invasive procedures should not vary from those routinely performed in each shelter environment i.e., for monitoring and/or treatment of that animal for its own benefit; thorough justification of

this will still be required regardless of shelter policy. Areas of interest include:

- Effective tools for the mitigation of stress in shelter cats, including but not confined to psychopharmaceutical options and different types of housing
- Management of chronic inflammatory diseases in the shelter situation
- Relative efficacy of ringworm (dermatophytosis) treatments that may include effects on environmental contamination levels

Cancer

Preventative, diagnostic and/or treatment approaches with high translational potential for:

- Oral squamous cell carcinoma
- Intestinal lymphoma – subtype(s) being addressed by such projects should be clearly defined e.g., small cell (low-grade) T-cell lymphoma

For this call, research data should be collected from populations of domestic cats (*Felis catus*) - in most situations those seen in primary care practices and/or shelters unless otherwise requested. Free-roaming unowned populations are also relevant. Projects involving other feline species or the impacts of cats on wildlife are not included in this call.

****Note that many of the following guidelines apply to all three categories of award. However, some instructions are award-type specific, and these instructions are in bold italic type. Please read all instructions carefully so that you can complete your application with reference to the correct eligibility and award criteria, budget maximum, project duration, and page limit for your award****

Award duration and budget limits:

The maximum duration of an Established Investigator Award is 36 months, and the total budget cannot exceed \$75,000 USD.

The maximum duration of a First Award is 24 months, and the total budget cannot exceed \$100,000 USD.

The maximum duration of a Pilot Award is 12 months, and the total budget cannot exceed \$10,000 USD.

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. Nor do applicants have 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. Our preference is not to fund projects that include euthanasia of animals for research purposes, or that derive data and/or samples from such projects. Justification for such activities needs to be significant in terms of rejecting alternative

approaches. Note that proposals recommended for funding by scientific reviewers are reviewed separately by animal welfare and ethics experts prior to funding.

Parachute science: Projects that include international collaborations should address international scientific engagement and benefits and include a named principal investigator (PI) or co-investigator in the country where the research will occur. The Foundation endeavors to achieve impact through ethical pathways and with the clear intention of inclusivity, diversity, and the elimination of the practice of parachute/colonial science.

COVID-19 pandemic-related planning: Research plans must include mitigation strategies for operational risks posed by the ongoing COVID-19 pandemic. Alternative strategies for travel restrictions, pandemic related mandates, supply shortages, etc., should be included in the proposal.

Environmental Policy: Consideration should be given to reducing the detrimental effects of research projects on the environment. Travel requests should be limited and well justified with respect to the project objectives. We encourage means of transportation with the lowest possible carbon emissions.

Grant Resubmission Policy: Proposal resubmissions are not permitted without explicit written permission from the Foundation. An investigator who resubmits a proposal without permission may be barred from applying to future RFPs.

For questions about Morris Animal Foundation Policies, contact grantapplications@morrisanimalfoundation.org.

SPECIFIC AWARD CRITERIA:

ESTABLISHED INVESTIGATOR. Competitive applicants for this award will have a record of expertise demonstrated through peer-reviewed publication. Researchers with active grants (either Established Investigator or First Award) as the RFP opens are not eligible. Prior Morris Animal Foundation grants must be complete with final report approval before the RFP opening date.

FIRST AWARD. First Award grants are designed to assist early career researchers in establishing a successful research program. The applicant must have completed a PhD and have a permanent position in a university, accredited zoo or conservation organization, or other non-academic equivalent. 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. Please state this in your candidate letter of intent. Previous funding as a co-investigator is acceptable. This application requires supporting statements from one or more appropriately experienced mentors.



PILOT STUDY. Pilot Study Awards provide funding for proof-of-concept studies in animal health research.

All applicants for all categories of 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 impact of their research. A maximum of one application as PI/co-investigator in response to this RFP is permitted.

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 for adherence to our [Health Study Policy for Animals Involved in Research](#).

PROPOSAL FORMAT, GUIDELINES, AND SUBMISSION INSTRUCTIONS

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

American Institute of Biological Sciences (AIBS) submission instructions:

Applications must be submitted through our portal at <https://morrisanimalfoundation.aibs-scores.org/>. All applicants must register to use the portal; your username will be your email. The portal home page will list open grant calls and you can begin your submission.

Important Submission Points:

- The user submitting the proposal should be the Applicant/PI.
- Ensure that you do not lose any information - save your work often (click “SAVE ALL ANSWERS”) and for as many times as needed before submission.
- Mistakes happen! If you discover a mistake after submitting your proposal, you can correct your work. You must “un-finalize” then re-validate to finalize and resubmit.
- Give yourself time - you may need technical assistance to complete your submission.
- Click “FINALIZE when ready to submit. At this point your application still needs institutional approval. Do not leave this until the last moment as your administrator needs to sign off electronically before the deadline.
- NOTE: If you “un-finalize” your proposal after your authorized institutional approver has signed, the proposal will require re-authorization from the institution. Once the deadline passes, no further changes are possible.
- Your application must be received by 5:00 PM Eastern Time on the designated due date.
- You will receive an email confirming approval. You also can check the status of your submission by logging onto the submission portal.

Submission Components:

The application comprises six sections: Title, Questions, People, Attachments, Approval and Finalize. Each section must be completed. The main project proposal is completed in the attachments section - other sections are completed directly in the portal.



I. Title (max 200 characters).

II. Questions

This section collects basic information about your application. Note that the budget total is the total of direct and indirect costs. Both summaries have a 2,000 character limit but are aimed towards different potential audiences; the lay summary should not duplicate the technical summary. We may use your lay audience summary in communications with the public or with potential funders. Lay language should be used, and we require a Flesch Reading Ease Score of 50-70. Please click [here](#) and paste in your lay language summary to verify the reading level. Click “SAVE ALL ANSWERS” at the bottom of this section to progress to part III.

III. People

A “Person Record” is created for the PI, any other investigators, and your authorized institutional signer who is needed to submit your application. ***For First Award applicants, person records for your mentor(s) and your Head of Department are also required.***

IV. Attachments

For the attachments section make sure that you use the provided template to help you organize your submission. 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 template (.docx) is sub-divided into 11 parts (sections A-L) and must be converted to a PDF for submission. In part L 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.

- A. Study Proposal
- B. Resubmission Summary*
- C. Sample Size Calculation
- D. Animal Involvement Justification
- E. Recombinant DNA/Biohazards/ Biosecurity Measures
- F. Facilities and Equipment
- G. Cited References
- H. Instructions for Budget. **The budget details are entered into a separate spreadsheet for upload**
- I. Budget Justification and Timeline
- J. Current and Pending Support
- K. Biographical Data
- L. Letters of Support



*Resubmissions are by invitation only

A. Study Proposal.

For the Established Investigator and First Awards - the proposal has a 5-page limit, including figures and tables and the one-page animal health impact section.

The Pilot Award proposal has a 3-page limit inclusive of figures and tables and a half-page animal health impact section.

Organize your proposal with the following sections:

(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: “Established Investigator” and “First Award” applicants should succinctly describe any previous results by the investigator which support 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.

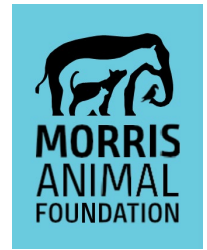
(iii) **Study Design and Methods:** Include the experimental design and methods for each objective. Data analysis methods must also be described.

(iv) **Possible Risks and Mitigation Plans:** Identify and address any potential shortcomings of the design and methods, or potential operational challenges.

(v) **Animal Health Impact** ([See Example Here](#)) (minimum 1 page): 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.

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

- Why is this work integral to the welfare or longevity of cats?
- 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 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 D9)
- Who do you propose to engage with and how? Include letters of support if applicable.
- How will the success of engagement activities be evaluated?
- What experience do the applicants have with non-academic engagement, and/or what training or other resources are available?

B. Resubmission Summary (3-page limit, excluding the original SAB review). Include a copy of the original SAB review of your proposal and your responses to reviewer comments. Answer questions thoroughly, as your resubmission might be evaluated by different SAB reviewers to those who reviewed your original submission.

C. Sample Size Calculation (no page limit): use the Sample Size Form from the proposal template as applicable.

D. Animal Involvement Justification Form (no page limit): fill this section from the proposal template, regardless of live animal involvement. This form is required.

E. 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. 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 other biological agents.

F. 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.



G. Cited References (2-page limit for Established Investigator and First Award proposals. 1-page limit for Pilot Awards): Include complete citations referenced numerically in the body of the proposal.

H. Instructions for Budget (1-page limit) This is uploaded separately from the main proposal. Use the provided budget Excel spreadsheet template. Do not exceed the budget limits and timescales described for each grant type on page 2 “Award duration and budget limits”. The Foundation will allow a maximum of 8% indirect costs (if charged by your institution).

Budget Limitations:

- **Equipment:** Requests for equipment purchases may not exceed \$5,000 for the lifetime of the project.
- **Tuition:** Morris Animal Foundation does not pay for tuition.
- **Salary:** Include salary for each person’s time spent on the project as “% project appointment.” Identify each person’s project role. Also include the fringe benefit rate for each person to calculate total personnel costs. If salary will not be charged to the project (in kind contribution), list the % project appointment as “0%” on the budget form. If a contributor’s salary is covered 100% by their employer, do not request salary support in the proposal.
 - **Key Personnel:** Salary requests for time spent on the project must be clearly defined and include % appointment and other current salary support. As we are an international funder, we expect the nature of these positions to be clearly described to aid review.
 - **Technicians, Residents, Fellows, and Students:** Salary requests are permitted but must be clearly defined and include % time commitment.

**Please note: No more than 10% of a postdoctoral salary should be included and should be clearly justified, e.g., for training of students, or the performance of highly technical components of the study.*

**Postdoctoral fellows applying to our Fellowship Program later this year are required to have an independent project and may not apply using the same proposal submitted to this Established Investigator, First Award, or Pilot Grant RFP.*

- **Travel:** Requests for travel to scientific meetings must be well-justified in terms of environmental and scientific impact and should not exceed \$2,000. Travel needed to complete research objectives should be budgeted separately. Travel must be essential; resources or activities that provide alternatives are preferred. Possible ongoing disruptions to travel due to COVID-19 should also be considered. For international project teams, activities should be conducted wherever possible by teams and/or collaborators already in-country.
- **Indirect Costs:** Up to 8% of the budget 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.

- **Other Project Expenses:** briefly categorize other project expenses e.g., laboratory or clinical consumables; reagents; non-equipment study supplies; service fees for specimen analysis.
- ✓ Once completed, upload Excel budget spreadsheet into the AIBS portal. This will be a separate upload from the rest of the proposal template.

I. Budget Justification and Timeline Summary (2-page limit): Use the budget justification form in the proposal template and the project timeline to demonstrate how the research objectives will be completed in the time frame requested. Include data analysis time and manuscript preparation time.

J. Current and Pending Support (No page limit): The Foundation wishes to support discrete research proposals that have not already received funding from elsewhere. This avoids duplicating lengthy review processes and widens our net to support other deserving, but as yet unfunded proposals. Please identify all active or pending support for the PI and all Co-Investigators. Where overlap, whether scientific or budgetary, may be perceived, please explain. The Foundation is also anxious to ensure that researchers have enough time to complete their projects. Therefore, we request information regarding time commitment to this project. Researchers who are over committed and already have 100% of their time allocated to other work, are not permitted to apply. Submissions to other funding sources should not duplicate this project unless we have already officially declined to fund it. Provide the following information for all current and pending support.

- Project ID, funding source, funding start and end dates
- Project title
- Summary: summarize the project objectives and results to date.
- Overlap: Summarize any potential overlap with the proposed project regarding the science, budget or committed effort.

K. Biographical Data (2-page limit per individual): include a bio-sketch for each PI and co-investigator) this might take the form of a resume/CV.

L. Letters of Support: Include a letter of support from any collaborator, funding agency, policy maker or commercial partner whose contributions are required to achieve the research objectives described in the proposal. ***For those applying for a First Award include a candidate letter of intent, mentor(s) letter(s) and a letter of support from your department head or equivalent. The letters must be submitted through AIBS SCORES.***

Once completed, convert word files to a PDF and combine all documents into a single PDF for upload.



E. APPROVAL

An authorized administrative official from your institution/place of work must approve your application. This should be done after all required sections are complete and attachments uploaded.

To initiate the institutional approval and submission process, click “select your approval invitee” and identify the individual responsible for signing off on your proposal from your designated person records that you created earlier.

FINALIZE YOUR SUBMISSION

Before you click “FINALIZE” you can review your entire submission by clicking on “Click here to preview your current submission content prior to finalizing it”. If you are missing any attachments, a message will prompt you to add the missing item. If all components are present/uploaded, the submission can be finalized. At this point content cannot be changed unless the institutional official declines approval.

Once you click “FINALIZE,” your nominated approval official will be notified by email and asked to review, validate, and officially submit your application. **THIS MUST BE DONE BEFORE THE DEADLINE.** It is the applicant’s responsibility to make sure that their Institutional Official has sufficient time to approve the application before the deadline. Your application is not considered to be fully submitted until approval is received – you will receive an email confirming approval. You also can check the status of your submission by logging onto the system, navigating to the proposal mechanism and clicking on your submission link.

QUESTIONS REGARDING THE SUBMISSION PROCESS

Please contact morrisanimalfoundation@aibs.org for technical assistance.