

**How to Submit an Established Investigator Grant Proposal**  
**Morris Animal Foundation (MAF)**  
**Deadline: April 1, 2008**

**\*\*\* Please note the following critical submission update for ALL 2008 proposals \*\*\***

**MAF has adopted a strict policy of adherence to proposal guidelines. This includes attention to required font size, page limits, margins, and number of title characters.**

***Any proposal that is outside of these guidelines will be returned and not reviewed.***

After a pre-proposal has been favorably reviewed by the Scientific Advisory Board, the prospective investigator is invited to submit a detailed proposal. Do not submit a proposal unless invited by Morris Animal Foundation. The proposal should be well defined and directed toward making significant progress within a specific time. Please note: MAF permits a maximum of 2 re-submissions of the same proposal (3 total submissions).

**Submission requirements for 2008 – Read carefully!**

- Email one (1) electronic copy of the proposal as one (1) single Adobe Acrobat Reader (.pdf) document that contains the **entire proposal, including all letters and supporting documents (all separate documents must be scanned and included in the single .pdf)**, to [grantapplications@morrisinganimalfoundation.org](mailto:grantapplications@morrisinganimalfoundation.org). Identify the grant ID number (D08XX-XXX) in the subject line of the email and name the electronic document (.pdf file) with this number. . . . **AND . . .**
- Mail one (1) original hard copy with original signatures and one (1) photocopy. It is recommended that you begin pursuing original signatures as soon as possible. If it is not possible to obtain original signatures, faxed signatures are acceptable; **however, you must** then include an original letter of willingness to collaborate from those co-investigators. The original must be single-sided but the copy can be double-sided. The original copy of the proposal should be paper/binder clipped in the upper left hand corner. The copy can be stapled.
- The emailed document and mailed copies must be **received (not post-marked)** by MAF by **April 1, 2008**

Use the following format for your proposal:

- I. **Title Page:** (limited to one page – the preferred format for a title page is included with these guidelines) Title Page must include MAF's assigned grant ID number (D08XX-XXX), project title (limit title to 100 characters), type of proposal: **Established Investigator, Pilot Study** (Note: Pilot Studies are for a maximum of one year and the budget can not exceed \$8,100 including indirect costs) **First Award, or Fellowship Training**, principal investigator, co-investigators, academic title, and suffix's such as DVM, PhD. If this proposal is a First Award or Fellowship Training proposal, clearly identify the mentor and fellow. **State if this proposal is a re-submission of a previously unfunded proposal.** The principal investigator must be a permanent faculty member or permanent employee of the institution. List **complete** mailing address (including institution name), phone, fax and **email** of principal investigator, mentors, fellows (if applicable) and all co-investigators. Indicate proposal division and subdivision, yearly amount (for each year) and total requested for proposal, and duration of project. The title page should carry signatures of the principal investigator, mentors, fellows (if applicable), co-investigators and other appropriate officers of the institution, such as the Dean or Department Head. Also include name, **complete** address (including institution name), phone number and **email** of officer authorized to sign agreements/contracts on behalf of your institution. It is suggested you use the sample title page format included with these guidelines.
- II. **Resubmission Summary:** **If this proposal is not a re-submission indicate N/A and proceed to section III.** If it is a re-submission, indicate if this is the first or second re-submission then attach a copy

of the proposal review **and** your response to the review and evaluator suggestions. Your response to the previous review will not count against the page limit; however, it must be double-spaced and cannot exceed 3 pages.

**III. Study Proposal:** This section of the application **cannot** exceed **15 (7 for pilot studies and Fellowship Training proposals)** double-spaced typed pages with 3/4 inch margins using an 11 point Arial or Helvetica font.

**The MAF scientific advisory boards have mandated that page limits, margins, font, and all other proposal guidelines will be strictly enforced. Failure to adhere to requested proposal guidelines will result in disqualification.**

Section III must contain the following sub-sections.

1. Project Summary (Abstract) (limit to 250 words).
2. Statement of Research Problem and Objectives in lay language for public audiences (limit to 75 words).
3. MAF solicits study sponsors to recoup granted funds. Please briefly address the following to provide us direction when we are seeking sponsorships should this proposal be funded.
  - a. List all specific breed(s)/species that will be studied in this project. List any breed(s)/species that could directly benefit from this research (i.e., breeds/species most commonly affected).
  - b. For wildlife studies, list any additional species, habitat, ecosystem, etc. that may directly benefit from the research.
  - c. Please list any groups, individuals, clubs, foundations, corporations, etc. you are aware of who might have a particular interest in this work.
4. Specific, Testable Hypothesis and Objectives to address the hypothesis: Be precise and enumerate. Feasibility and realistic expectations of objectives is paramount. Overly ambitious objectives, relative to either time span or scope, will be heavily criticized and penalized in scoring.
5. Justification, Significance, and Literature Review: (limit to 4 pages) Include relevancy to animal owners and veterinarians as well as applicable breeds or species. The literature review should indicate current status of research in the area including investigator's contributions.
6. Preliminary Data: **Preliminary data that supports the proposal is vital and will substantially strengthen your proposal.** Indicating that preliminary data exists is not sufficient. Also, state here whether this proposal is a continuation/next phase of a previous or current MAF grant. If it is, indicate grant ID number, title, and a brief summary of the progress and/or final results. We recognize that the purpose of most pilot studies is to gather preliminary data to support a larger scale proposal in the future, however, if any preliminary data exists and is pertinent to this proposal, show the data.
7. Experimental Methods & Design: Clearly address specific objectives. Be precise about experimental design, number of animals, treatments, sampling schedules, expected outcome, etc. **For each specific aim provide a rational experimental methods and design and a section on expected outcomes and pitfalls.** Justify any clinical trial numbers that are cited. It is highly recommended that a statistician be consulted prior to the design of the study. **A thorough description of data analysis must be included in this section including power calculations. For power analysis, describe how it was performed and any assumptions behind the analysis.** Technical terminology should be defined on first usage, acronyms and abbreviations may be used subsequently. Applicants using client-owned animals must document that the institutional case load is adequate to provide the number of animals per year needed to complete the study as proposed. For drug studies, state status, availability, and requested

manufacturer support. If the proposal involves the use of a new or newly applied pharmaceutical, justification of the dose and dosing schema is required.

8. Timetable: Indicate sequence and schedule of experiments for the total project, and duration of project (one year, two years, etc.). **A maximum of three years is permitted.** All projects are subject to annual review. Approval of multiple-year projects does not guarantee funding beyond year one. Please evaluate your timetable carefully. One-half of the last quarterly payment of all grants will be withheld pending submission and review of the final report. You do not need to schedule time for publication, but **you must schedule time to complete data analysis** so it can be included in the final report.

**IV. Animal Involvement Justification (see attached outline): All proposals, regardless of live animal involvement, must complete the Animal Involvement Justification form included in these guidelines.** Limit your form to two (2) pages, which will not count against the page limit.

**Humane treatment of animals is of utmost priority to MAF and will be reviewed closely. A proposal will be rejected if it does not adhere to our Health Study Guidelines, which can be found on our web site at [www.morrisanimalfoundation.org](http://www.morrisanimalfoundation.org).**

State the status of your Animal Care and Use Committee (ACUC) protocol here. All funded MAF proposals will be required to submit the entire ACUC protocol and document approval prior to funding.

Prior to starting any MAF health study using live animals (including client-owned), ACUC approval is required whether the institution requires it or not. The protocol for client-owned animals must be approved by the appropriate peer review committee before the project is funded. A written consent by the owner must also be obtained. Your sample informed client consent form must be attached to the proposal in section XIV, Supporting Documents. A suggested list of items to be considered in an informed client consent form is included with these guidelines.

The remainder of the proposal may be single-spaced.

**V. Recombinant DNA/Bio-hazards:** Applicants using recombinant DNA techniques must indicate that they have complied with NIH guidelines relative to this technology and that they have approval from the Biological Safety Committee of their institution to conduct the proposed research if it is funded. Also indicate here if there are any other potential bio-safety concerns including the use of radiation.

**VI. Facilities & Equipment:** Availability of necessary facilities and equipment to complete the proposed study should be documented. If more than one institution is involved, a letter of willingness to collaborate must be attached from the outside institution(s). **If this is a Fellowship Training proposal skip this section, the necessary information should be stated in the mentor's letter.**

**VII. Cited References:** Include article titles, list all authors (PI name in bold), and complete references to all publications.

**VIII. Budget:** (Annual request **and** total request – see sample table included): Your entire budget (including totals) must be limited to one page. This does not apply to the budget justification. **Pilot studies are limited to \$7,500 + indirect costs, for one year (the total award can not exceed \$8,100).** Indicate only amounts requested from MAF. In the case of multiple-year projects, the budget should show expenses for each year in separate columns. Commitment of funding beyond any previous year is based on satisfactory progress and availability of funds. MAF does not pay for capital equipment, travel to scientific meetings, or salaries for faculty appointed to regular/tenure track, full-time, full-salaried positions. Salary requests for principal investigators must be clearly defined and justified in the budget justification section. You may request salary for technicians, residents, graduate students, and postdoctoral fellows, based on their percentage of time involved in the project.

MAF has a separate Travel Fund to provide financial support for travel to scientific meetings for graduate students, postdocs, MAF Fellows, etc. For more information on applying to the Travel Fund please contact Tobie McPhail or a member of the Scientific Programs & Advancement department.

MAF allows up to 8% of the yearly budget to be applied to indirect costs, if your institution charges for these costs. You must calculate your own 8% indirect costs and show as a separate line item above each year's grand total. If your institution charges less than 8%, you may only claim the lower percentage. MAF believes that it is entitled to share in the net royalty revenues of any patent/invention resulting from this study.

**This section (Budget) is not required of Fellowship Training proposals.**

**IX. Itemized Budget Justification:** (MAF budget only): Salaries, supplies, and animal care costs not justified may be deleted from the budget of an approved/funded proposal. The role of each investigator should be clearly defined. Investigator salary requests will be thoroughly scrutinized. Indicate and justify a percent effort on this grant for all individuals, such as technician, graduate student, etc., for whom MAF funds are requested.

**This section (Budget Justification) is not required of Fellowship Training proposals.**

**X. Indicate and justify any changes between the pre-proposal and proposal. Note: Significant increases in budget from pre-proposal to full proposal may not be reviewed favorably.**

**XI. Other Support (adapted from NIH guidelines):** Other Support includes all financial resources, whether Federal, non-Federal, commercial or institutional, available in direct support of an individual's research endeavors, including research grants and current MAF grants. Overlap, whether scientific, budgetary, or commitment of an individual's effort greater than 100 percent is not permitted.

**Please include the following information in this section:**

**Project Number:** If applicable, include a code, grant ID, or other identifier for the project.

**Source:** Identify the agency, institute, foundation, or other organization providing the support.

**Major Goals:** Provide a brief statement of the overall objectives of the project, subproject, or subcontract.

**Dates of Approved/Proposed Project:** Indicate the dates of the project as approved/proposed.

**Annual Costs:** In the case of an active project, provide the current year's budget. For a pending project, provide the proposed budget for the entire project.

**Overlap:** After listing all support, summarize for each individual any potential overlap with the active or pending projects and this application in terms of the science, budget, or an individual's committed effort.

**To view a sample visit:**

[http://grants.nih.gov/grants/funding/phs398\\_ver0406/instructions/p3\\_other\\_support.htm](http://grants.nih.gov/grants/funding/phs398_ver0406/instructions/p3_other_support.htm)

**XII. Grants from Prior MAF Support (last 3 years):** If any of the principal and/or co-investigators, including the mentor for First Award and Fellowship training proposals, have received MAF support in the past 3 years, information on results from that prior funding is required. This information will be used in the review of the proposal and is limited in length to one (1) single spaced page per award. For each previous MAF award, list [a] the MAF proposal number, [b] the title of the project, [c] the amount and period of support (dates), [d] a brief summary of the objectives, [e] a summary of the results of the completed work, [f] the long-term effects of these results, and [g] a list of the refereed publications resulting from that MAF award.

**XIII. Biographical Data on Principal Investigator, Co-Investigators, Mentors and Fellows (when applicable):** Individual biographical sketches must not exceed two (2) pages per investigator. List your role on this proposal (principal investigator, fellow, etc.) and the most representative publications relevant to this project. Sample is included.

**XIV. Supporting Documents:** Attach copies of other supporting documents such as letters of collaboration, Species Survival Plan (SSP) endorsement, client consent form, etc. **Do not include or attach abstracts, manuscripts, articles, publications, CDs, etc.!**

**XV. IMPORTANT:** You must attach a copy of the original pre-proposal to the back of all copies of this

**proposal.**

**In the event the principal investigator is anticipating changing institutions, they must notify MAF as soon as possible.**

Complete proposal submission includes:

1) One emailed proposal, sent to [grantapplications@morriscaninimalfoundation.org](mailto:grantapplications@morriscaninimalfoundation.org), as one single Adobe Acrobat Reader (.pdf ) document that contains the **entire proposal, including all letters and supporting documents**. Identify the grant ID number (D08XX-XXX) in the subject line of the email and name the electronic document (.pdf file) with this number.

**AND**

2) One original hard copy of the proposal with original signatures (single-sided), and one photocopy (can be double-sided) mailed to the following address and received (not postmarked) by the April 1 deadline.

**Address To (Note new address):**

Kristin Benjamin, VP-Scientific Programs and Advancement  
Morris Animal Foundation, 10200 East Girard Avenue, Suite B430, Denver, CO 80231

800-243-2345 or 303-790-2345

[www.MorrisAnimalFoundation.org](http://www.MorrisAnimalFoundation.org)

Revised 1/2008

## Sample Title Page

Put your MAF assigned grant ID number here

### TITLE OF PROPOSAL (Do not exceed 100 characters)

**State type of proposal: Established Investigator, Pilot Study, Fellowship Training, or First Award, if Fellowship Training or First Award clearly identify the mentor, PI, fellow, and other Co-Investigators below**

Division: Canine

Subdivision: Cancer

Re-Submission: Yes/No

Principal Investigator/Mentor  
(if applicable):

Full Name and Suffix

Institution Name

Address Line 1

Address Line 2

Phone and Fax Number

**Email Address**

Fellow\_(if applicable):

Full Name and Suffix

Institution Name

Address Line 1

Address Line 2

Phone and Fax Number

**Email Address**

Co-Investigator:

Full Name and Suffix

Institution Name

Address Line 1

Address Line 2

Phone and Fax Number

**Email Address**

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Signature

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Signature

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Signature

Co-Investigator:

Full Name and Suffix

Institution Name

Address Line 1

Address Line 2

Phone and Fax Number

**Email Address**

Co-Investigator:

Full Name and Suffix

Institution Name

Address Line 1

Address Line 2

Phone and Fax Number

**Email Address**

Co-Investigator:

Full Name and Suffix

Institution Name

Address Line 1

Address Line 2

Phone and Fax Number

**Email Address**

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Signature

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Signature

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Signature

**Duration of project: X years**

**Total requested per year: Year 1: \$ , Year 2: \$ , Year 3: \$**

**Total requested: \$**

Officer authorized to sign agreements:

Full Name and Suffix

Institution Name

Address Line 1

Address Line 2

Phone and Fax Number

**Email Address**

Dean, Dean of Research, Dept. Head, etc.:

Full Name and Suffix

Institution Name

Address Line 1

Address Line 2

Phone and Fax Number

**Email Address**

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Signature

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Signature

This is the preferred format for the title page. Slight variations are acceptable, however, be sure to include all required information (see "Section I" in the proposal guidelines).

**VII. MAF Budget:**

Category	Year 1	Year 2	Total
<b><u>Personnel:</u></b>			
1. Principal investigator (name)*	\$0	\$0	\$0
2. Co-investigator #1 (name)	\$0	\$0	\$0
3. Co-investigator #2 (name)	\$0	\$0	\$0
4. Technician (name) Salary (X%) Fringe benefits (Y%)			
5. Student Assistant (name) Salary (X%) Fringe benefits (Y%)			
Total Salaries & Wages			
<b><u>Supplies &amp; Expenses:</u></b>			
1.			
2.			
3.			
4.			
Provide justification in section VIII.			
Total Supplies & Expenses:			
<b><u>Animal Use &amp; Care:</u></b>			
Animal Purchase:			
Animal Per diem:			
Total Animal Care:			
<b>Subtotal of All Categories:</b>			
Maximum of 8% - Indirect Costs:**			
<b>Grand Total Requested from MAF:</b>			

\* Salary requests for principal investigators must be clearly defined and justified. You may request salary for technicians, residents, graduate students, and postdoctoral fellows, based on their percentage of time involved in the project

\*\*Indirect costs may be claimed only if you are charged for indirect costs by your institution for work carried out in this proposal. **You must make this calculation yourself.** If your institution charges less than 8%, claim only that amount and indicate the percentage.

**VIII. Itemized Budget Justification:**

**Animal Involvement Justification**  
(From Section IV of the proposal guidelines)

**Morris Animal Foundation (MAF) is dedicated to funding scientifically sound, relevant and humane studies that specifically address the health and well being of animals. In October 2004, MAF's Board of Trustees approved new health study guidelines that clarify and strengthen the organization's commitment to funding humane health studies. These guidelines were written to ensure that each and every animal involved in an MAF funded health study receives excellent, compassionate care throughout the study. MAF shall not fund health studies which require euthanasia as an endpoint or the induction of disease or injury, unless the nature of the disease or condition to be studied is of such critical importance to the species that such means are justified, and that meaningful information can be obtained no other way. Furthermore, MAF will not fund any study that induces or allows pain or distress, other than short-term minor pain or distress that can be controlled by appropriate anesthetic, analgesic or tranquilizing drugs. The full Health Study Guidelines are posted on our web site at [www.morrisanimalfoundation.org](http://www.morrisanimalfoundation.org).**

- A. If this study does not involve live animals please indicate here by N/A: \_\_\_\_\_  
Briefly describe what biological samples, tissues, etc. will be used and where & how will they be acquired. (Please note: MAF reserves the right to request ACUC for any Foundation study regardless of the Institution's requirements)
- B. If this study involves live animals, succinctly address the following: (limit to 2 pages restating the questions and directives).
1. What species will be studied?
  2. How many animals will be used?
    - a. Summarize numerical justification
  3. Does this study induce disease or cause distress in animals? If yes,
    - a. Defend the necessity of experimental design
    - b. Explain how pain and/or suffering will be controlled
    - c. Justify that no alternative can be used to accomplish study goal and the disease/condition to be studied is of critical significance to the species
  4. What will happen to the animals upon completion of the study?
    - a. If adoption, explain the adoption process and what will happen to animals that cannot be placed in homes.
    - b. If euthanasia, provide the following additional information
      - i. Total number that will be euthanized and justification for numbers
      - ii. Method of euthanasia
      - iii. Justification that no alternatives can be used to accomplish study goal(s) and that the disease/condition to be studied is of critical significance to the species
      - iv. Reason for euthanasia in lay language (this wording may be shared with staff, donors and media)

**Please note:** If an animal participates in an invasive study, MAF may require that a guarantee is provided, through principal investigator and institutional signatures, that the animal will not participate in any future invasive study.

MAF does not look favorably upon inclusion of ancillary data in MAF funded research that includes animal use protocols not in agreement with our Health Study Guidelines, even if it is obtained using other funding sources.

## **Suggested "Elements of Consent" to include in Informed Client Consent documents**

1. Purpose of Research
2. Expected Duration of Participation
3. Description of Procedures
4. Possible Discomforts and Risks
5. Possible Benefits
6. Alternative Treatment (or Alternative to Participation)
7. Extent of Confidentiality of Records
8. Compensation or Therapy for Injuries
9. Contact Person for the Study
10. Voluntary Participation and Right to Withdraw
11. Termination of Participation by the Principal Investigator
12. Unforeseen Risks
13. Financial Obligations
14. Hospital Review Committee Contact Person

## Morris Animal Foundation Proposal Check Sheet

- I. Title Page
- Your assigned MAF Grant ID Number (D08XX-XXX)
  - Project title (100 character limit)
  - Indicate if the proposal is **Established Investigator, Pilot Study, First Award** or **Fellowship Training**
  - Proposal division and subdivision
  - Indicate if proposal is a re-submission of a previously unfunded MAF proposal
  - Principal investigator, co-investigators, mentors and fellows (if applicable) **with requested information**
  - Signature of principal investigator, co-investigators, mentors and fellows (if applicable) (original should have original signatures)
  - Project length (in years), amount requested per year and grand total
  - Project dollar amounts
  - Name, complete address, phone number, and **email** of officer authorized to sign agreement.
  - Official institution signatures (such as the Dean)
  - Candidate letter of intent and mentor(s) letter(s) after title page for **First Award** Proposals. Letter of intent, mentor and department head letters, salary justification, and transcripts after title page for **Fellowship Training** proposals.
- II. Resubmission Summary
- First or second re-submission noted
  - Proposal review attached
  - Response to proposal review (limit 3 double-spaced pages)
- III. Study proposal (limited to 15 pages – 7 pages for pilot studies & Fellowship Training proposals)
- 1. Project summary (abstract) (250 words)
  - 2. Statement of research problem in lay language (75 words)
  - 3. List specific breed(s)/species affected
  - 4. Specific, Testable Hypothesis
  - 5. Justification/significance/literature review
  - 6. Preliminary data
  - 7. Experimental methods and design
  - 8. Timetable
  - 9. **Double check adherence to proposal guidelines including font size, page limits, margins, etc.**
- IV. Humane Treatment of Animals
- Animal Care and Use approval status
  - Animal Involvement Justification (limit 2 single spaced pages)
  - Copy of client consent form attached (supporting documents)
- V.  Recombinant DNA/Bio-hazard compliance
- VI.  Facilities and equipment
- VII.  Cited references
- VIII.  Itemized budget for each year of project (one column per year and total of all years column) with , not required for Fellowship Training proposals. Indirect costs must be calculated by applicants.
- IX.  Budget justification, not required for Fellowship Training proposals
- X.  Changes between pre-proposal and proposal
- XI.  Current and pending support
- XII.  Prior MAF support
- XIII.  Biographical data for each PI, co-Investigator, mentor and fellow (when applicable)
- XIV.  Supporting Documents
- XV.  Copy of pre-proposal
- XVI.  Pages numbered, excluding title page
- XVII.  **Complete proposal submission includes:** 1) One emailed proposal, sent to [grantapplications@morrisanimalfoundation.org](mailto:grantapplications@morrisanimalfoundation.org), as one single Adobe Acrobat Reader (.pdf) document that contains the **entire proposal, including all letters and supporting documents**. Name the document with the grant ID number (D08XX-XXX) and identify the grant ID number (D08XX-XXX) in the subject line of the email. 2) One original hard copy of the proposal with original signatures (single-sided), and one photocopy (can be double-sided) **ALL** must be received (not postmarked) by the April 1 deadline.

### BIOGRAPHICAL SKETCH

Provide the following information for each key personnel in the order listed on the title page.  
**DO NOT EXCEED TWO PAGES PER PERSON.**

NAME		POSITION TITLE	
EDUCATION/TRAINING (Begin with baccalaureate or other initial professional education and include postdoctoral training.)			
INSTITUTION AND LOCATION	DEGREE (if applicable)	YEAR(s)	FIELD OF STUDY

- A. **Role.** List your role for this proposal, Principal Investigator, Co-Investigator, Mentor, Fellow
- B. **Positions and Honors.** List in chronological order previous positions, concluding with your present position. List any honors. List present membership on any advisory committees.
- C. **Selected peer-reviewed publications.** List, in chronological order, the titles, ALL authors (PI name in bold), and complete references to all publications during the past three years and to representative earlier publications pertinent to the application.  
**(Do not exceed two pages).**