

# FELLOWSHIP TRAINING GRANT PROPOSAL

## PROGRAM SUMMARY

The mission of Morris Animal Foundation (MAF) is to bridge science and resources to advance the health of animals. To achieve this aim, we fund hypothesis-driven, humane animal health research projects with high scientific merit and the potential for significant impact on animal health.

Fellowship Training grants are designed to assist new investigators in launching a successful research career by providing salary support in a quality mentoring environment.

Proposals should be designed to convince the reviewers that the proposed project will advance the science of animal health; the investigator clearly understands the health problem and has the expertise to conduct the study; and the approach is scientifically sound.

## QUALIFICATIONS OF APPLICANT

- Must have a DVM and/or PhD.
- Must be a full-time graduate student or have a postdoctoral research appointment.
- Must not have completed more than two years of full-time postdoctoral research training on the proposed project.
- Clinical residents and other applicants with clinical service requirements are not eligible.
- Must devote at least 75 percent of their time to the funded research.

## FELLOWSHIP TRAINING CRITERIA

- **Mission Adherence:** Projects must advance the science of canine, feline, equine, llama, alpaca, or wildlife health. Projects oriented toward human health and agricultural animal health do not fall within Morris Animal Foundation's mission and will not be accepted.
- **Health Study Policy:** Projects must adhere to MAF's [Health Study Policy for Animals Involved in Research](#).
- **Application Limits:** MAF permits a maximum of two applications as Principal Investigator per year.
- **Resubmissions:** A proposal that is not approved for funding can be re-submitted a maximum of two times (three total submissions to MAF).
- **Budget:** The budget cannot exceed \$50,000 (including benefits and indirect costs) per year. Funds for this award can be used solely for the fellow's salary.
- **Duration:** Maximum study duration is two years.
- **Mentor:** Must have the support of a faculty mentor in the applicant's field.

## APPLICATION PROCESS

MAF grant applications have two components: an online form and a full proposal attachment. Applications must be received by 11:59 PM EST on the designated due date. To submit an application, please complete the following:

1. **Online Form** with contact information for the investigator(s) and institution
2. **Full Proposal** document uploaded to the online form (see proposal guidelines below).

## REVIEW PROCESS

All proposals submitted to MAF go through the following review process. For more details about our review process, please watch [our video](#).

1. Researchers submit grant proposals.
2. Each abstract is reviewed on scientific merit and potential impact by five Scientific Advisory Board (SAB) members.
  - a. Only the highest scoring abstracts will advance to full proposal review. Proposals not chosen for full review will not receive written reviewer feedback.
3. Proposals are reviewed internally for adherence to guidelines.
4. Full proposals that pass abstract and internal review are assigned to two SAB member reviewers. Proposals are reviewed and scored based on [this rubric](#).
5. Reviewers present evaluations to the full SAB at an annual review meeting. Based on scores, the SAB recommends projects for funding.
6. All projects recommended for funding are reviewed by MAF's Animal Welfare Advisory Board (AWAB) for adherence to our Health Study Policy for Animals Involved in Research.

## PROPOSAL GUIDELINES

Failure to adhere to these guidelines will result in disqualification. The fellow must prepare the proposal independently, with mentor input. If any of the questions are not applicable, indicate this with "N/A".

### 1. **Proposal Format:**

- A. Single-spaced or greater, using no smaller than an 11-point font (Times New Roman or Arial font preferred) with a minimum of ¾ inch margins.
- B. The full proposal must be converted to a single PDF document that includes all letters and attachments and does not exceed 5MB.
- C. The order of the written proposal should follow the outline described below, including use of the outline numbering and headings.
- D. Technical terminology should be defined on first usage; acronyms and abbreviations may be used subsequently.

### 2. **Proposal Outline:**

- A. **Abstract** (one-page limit): Abstracts should not contain information that identifies the investigators or any charts or graphics and must use the following headings:
  - i. **Title:** limit 150 characters, including spaces. Do not use 'all caps'.
  - ii. **Rationale**
  - iii. **Hypothesis/Objectives**
  - iv. **Experimental Design and Methods**
  - v. **Preliminary Data**
  - vi. **Expected Results**
  - vii. **Budget and Timeline:** Include each year's total budget and project grand total including indirect costs.
  - viii. **Potential Impact for Animal Health**
- B. **Title Page** (one-page limit): Name, institution, and email address of fellow, mentor(s) and all co-investigators.
- C. **Resubmission Summary** (three-page limit – excluding copy of the original review): If this proposal is a resubmission of a previously-reviewed full proposal, include a copy of the review and your responses to the reviewer's comments. Please answer questions thoroughly and be aware that your resubmission might be reviewed by different SAB members than previous submissions.
- D. **Letters**

- i. **Candidate Letter of Intent** (two-page limit): This letter should:
  1. Address your previous educational background, training and research experiences
  2. Provide insight into your suitability, motivation and commitment to a career in animal health research.
  3. Describe your career vision and how this training award and the proposed research will assist in your progress toward becoming an independent established investigator.
- ii. **Mentor Letter** (two-page limit per mentor): A letter is required from each mentor and should:
  1. Address the candidate's accomplishments, perceived strengths, motivation, academic abilities and potential as an independent research scientist.
  2. Demonstrate that there will be a strong mentoring relationship that includes formal and informal opportunities to discuss research. If the mentor is not in close proximity to the fellow, the mentor must demonstrate that his or her availability will be consistent.
  3. Include the mentor's history of mentoring, including list of mentees and their current positions.
  4. Describe the role of the mentor and the candidate in the preparation and writing of this fellowship application and the status of research project funding. Project funding must be in place prior to awarding the fellowship.
- iii. **Department Head Letter** (one-page limit): This letter should confirm that:
  1. The applicant is a full-time graduate student or has postdoctoral research appointment.
  2. The applicant will be allowed adequate time to conduct the proposed research.
- E. **Training Plan** (one-page limit): Provide a detailed plan for mentoring with career development and training objectives. Describe the institutional environment and how this training environment will enable the fellow to achieve success.
- F. **Salary Verification** (one-page limit): Formal documentation from your institution's administration office must show approval of the requested annual salary and benefits based on the institution's salary scales and your experience. The salary request should be broken out into annual salary, fringe benefits and indirect costs.
- G. **Unofficial Educational Transcripts** (no page limit): Submit all transcripts beginning with year one of graduate and/or veterinary training.
- H. **Study Proposal** (five-page limit including figures, tables and graphics). Please include the headings outlined below.
  - i. **Hypothesis and Objectives:** Be precise and enumerate specific, testable hypotheses with realistic objectives to be met within the timeline and budget of the proposal.
  - ii. **Justification, Significance and Literature Review:** Clearly describe the background of the problem, justify the need for the study, and state the importance of expected findings. The literature review should indicate the current status of research in the area, including the investigator's contributions.
  - iii. **Preliminary Data:** Succinctly describe any previous results by the investigator which support the proposed research. If this project is a continuation of a previous or current MAF study, include grant ID number, title and a brief summary of the progress and/or final results. Preliminary data will substantially strengthen your proposal.

- iv. **Experimental Methods and Design:** Describe the experimental approach, including the design, experimental methods, number of animals, treatments, sampling schedules, potential pitfalls, and alternative approaches for each objective. A thorough description of proposed data analysis methods must be included.
  - v. **Timeline:** Indicate the sequence and schedule of experiments as well as the duration of the project. Justify that the objectives can be completed in the given timeline. A maximum of two years is permitted. Include sufficient time to complete data analysis.
  - vi. **Expected Results:** Indicate expected results, your proposed plan for disseminating information generated by your work to the scientific and lay audience, and potential means of translating the results into practice.
- I. **Sample Size Calculation** (no page limit): Describe the method of power analysis using the [Sample Size Form](#).
  - J. **Animal Involvement Justification** (no page limit): Include the required [Animal Involvement Justification \(AI\) form](#) in your proposal, regardless of live animal involvement.
  - K. **Recombinant DNA/Biohazards** (no page limit): Applicants using recombinant DNA techniques must confirm that they have complied with National Institutes of Health guidelines for this technology and that they have approval from their institution's Biological Safety Committee to conduct the proposed research if it is funded. Also indicate any other potential biosafety concerns, including the use of radiation.
  - L. **Facilities and Equipment** (one-page limit): Availability of necessary facilities and equipment to complete the proposed study should be documented. If more than one institution is involved, a letter of collaboration from the outside institution(s) must be included at the end of the proposal.
  - M. **Cited References** (three-page limit): Include complete citations referenced numerically in the body of the proposal.
  - N. **Budget** (one-page limit): Use the required [budget form](#). Include annual subtotals, calculated indirect costs and grand totals in all applicable fields. All funds must be U.S. dollars.
    - i. **Amount:** The budget cannot exceed \$50,000 (including benefits and indirect costs) per year.
    - ii. **Duration:** Maximum study duration is two years.
    - iii. **Budget Limitations:** Fellowship training grant funding is limited to salary support only. Project expenses and tuition are not supported by this award.
    - iv. **Indirect Costs:** MAF allows up to 8 percent of the budget to be applied to indirect costs, if your institution charges for these costs. Where a subaward to another institution is proposed, the total indirect costs may not exceed 8% of the total budget.
  - O. **Itemized Budget Justification** (one-page limit): Specifically justify the cost of each item in the budget. Costs not justified will not be approved. The role and percent effort of each individual for whom MAF salary funds are requested should be clearly defined.
  - P. **Current and Pending Support** (no page limit): Include all financial support (e.g., federal, nonfederal, commercial, institutional) currently available in support of the fellow, mentor and co-investigators' research programs. Overlap, whether scientific, budgetary or commitment of an individual's effort greater than 100 percent, is not permitted. Provide the following information for all current and pending support:
    - i. **Project ID**

- ii. **Funding Source**
  - iii. **Project Title**
  - iv. **Summary:** Brief summary of the objectives and results to date
  - v. **Budget:** In the case of an active project, provide the budget. For a pending project, provide the proposed budget.
  - vi. **Timeline:** In the case of an active project, provide start date and projected end date. For a pending project, provide the anticipated start and end dates.
  - vii. **Overlap:** Summarize any potential overlap with the proposed project regarding the science, budget or committed effort.
- Q. **Prior MAF Support:** (no page limit): If the fellow, mentor(s), and/or co- investigator(s) have received MAF support in the past three years, provide the following information for each MAF award received:
- i. **MAF Grant ID**
  - ii. **Project Title**
  - iii. **Summary:** Brief summary of the objectives and results to date
  - iv. **Budget**
  - v. **Timeline:** Provide start and end dates.
  - vi. **Presentations and Publications:** List of the presentations and publications resulting from the award
  - vii. **Patents:** List of patents resulting from the award
- R. **Biographical Data** (two-page limit per individual): For each fellow, mentor(s) and co-investigator(s), provide the following information:
- i. **Name**
  - ii. **Position/Role** on this project
  - iii. **Current Position** (title, name, and address of institution)
  - iv. **Education/Training** (degrees, institution, year of graduation, field of study)
  - v. **Previous Positions and Honors** (include membership on any advisory committees)
  - vi. **Selected Peer-Reviewed Publications** (include titles, all authors, and complete reference)
- S. **Letters of Support:** Include support letters from all collaborators