FELLOWSHIP TRAINING GRANT PROPOSAL



GENERAL INFORMATION:

The mission of Morris Animal Foundation (MAF) is to advance the science of animal health. Toward this aim, we are dedicated to funding hypothesis-driven and humane animal health research projects of high scientific merit and potential impact. The <u>Fellowship Training Grant</u> is designed to assist new investigators in launching a successful research career by providing salary support in a quality mentoring environment. To see whether you qualify for a Fellowship Training Grant, see "Qualifications of Applicant" below.

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

1. Online form

- **a.** Information entered into the online form (i.e., title, principal investigator, abstract, budget) *must match information contained in the proposal*.
- **2.** Full proposal document (see quidelines below) uploaded to the online form
 - **a.** The full proposal must be converted to a single PDF document that includes all letters and attachments, and does not exceed 5 MB. Proposals not attached to the online application will not be accepted
 - **b.** Please be sure that all documents in the PDF are legible.
 - **c.** The last page of the online application form will prompt you to upload the full proposal.
 - **d.** Once your application and full proposal are submitted, they cannot be changed. Please review carefully before clicking "Submit."

PROPOSAL GUIDELINES:

- 1. Proposal objectives: Proposals should be designed to convince the reviewers that the proposed project will advance the science of animal health; the investigator(fellow) clearly understands the issue and has the expertise to conduct the study; and the approach is scientifically sound. Projects using animal models to approach a human health issue are not appropriate.
- **2. Application limits:** MAF permits a maximum of two applications as Principal Investigator per year. A proposal that is not approved for funding can be re-submitted a maximum of **two** times (three total submissions to MAF). Resubmissions should clearly address reviewer concerns.
- **3.** Qualifications of applicant:
 - **a.** Applicants must have a DVM or PhD and be in a pre- or postdoctoral research program.
 - **b.** The applicant cannot have completed more than two (2) years of full-time postdoctoral research training on the proposed project.
 - **c.** Clinical residents and other applicants with clinical service requirements are not eligible.
 - **d.** Successful candidates should have completed the majority of coursework for their program and must devote at least 75 percent of their time to the funded research.
 - **e.** Applicants must prepare the proposal independently, with mentor input.

4. Proposal format:

- **a.** Proposals should be written on 8.5×11 inch paper with a minimum of $\frac{3}{4}$ inch margins
- **b.** Single-spaced or greater, using no smaller than an 11-point font (Times, Times New Roman or Arial font preferred)
- **c.** Page limits for each section must be strictly observed.
- **d.** The order of the written proposal should follow the outline described below, *including use of the outline numbering and headings.*
- e. If any of the questions are not applicable, indicate this with "N/A".
- **f.** Figures, tables and graphics must be included in the "Study Proposal" page limit. A questionnaire or survey, that is part of the project, can be included as an addendum if it is critical to the review of the proposal. Other addenda and extra information beyond the page limit will not be reviewed.
- **q.** Failure to adhere to these quidelines will result in disqualification.

5. Proposal outline:

- I. Title and Abstract (one-page limit): This page should contain only the project title and scientific abstract, exactly as outlined below. Abstracts will be evaluated based on the scientific merit and potential impact of the proposed research as described in the abstract, and only the highest scoring abstracts will advance to full proposal review. Abstracts should not contain information that identifies the investigators and must use the following headings:
 - 1. Title: limit 150 characters, including spaces. Do not use 'all caps'.
 - 2. Rationale: description of the problem and the need for the research being proposed.
 - 3. Hypothesis/Objectives
 - 4. Experimental Design and Methods
 - 5. Preliminary Data
 - 6. Expected Results
 - **7. Budget and Timeline:** Please include each year's total budget and project grand total including indirect costs. Check that the budget indicated here matches the required budget form (see below) and the budget in the online application.
 - 8. Potential Impact for Animal Health

Do not include any charts or graphics in the abstract. Proposal abstracts not chosen for full review will receive notice within 90 days of submission, and will not receive written reviewer feedback.

- **II. Title page** (one-page limit): Name, institution, and email address of **principal investigator** and all **co-investigators**.
- III. Letters, Salary Verification and Educational Transcripts (see page limits below):
 - **1. Candidate letter of intent** (two-page limit): This letter should:
 - a. Address your previous educational background, training and research experiences
 - **b.** Provide insight into your suitability, motivation and commitment to a career in animal research.
 - **c.** Describe your career vision and how this training award and the proposed research will assist in your progress toward becoming an independent established investigator.
 - **2. Mentor letter** (two-page limit per mentor): The mentor letter should:
 - **a.** Address the candidate's accomplishments, perceived strengths, motivation, academic abilities and potential as an independent research scientist.
 - **b.** 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.

- **c.** Include the mentor's history of mentoring, including list of mentees and their current positions.
- **d.** Be written by each mentor if more than one mentor is involved in the proposal.
- **e.** Provide 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).
- **3. Training Plan** (one-page limit): This letter should 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.
- **4. Department head letter** (one-page limit): The department head letter should confirm that:
 - **a.** The applicant has a full-time graduate student or postdoctoral research associate appointment
 - **b.** The applicant will be allowed adequate time to conduct the proposed research.
- **5. 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.
- **6. Educational transcripts (unofficial)** (no page limit include these at the end of the full proposal): Submit all transcripts beginning with year one of graduate and/or veterinary training.
- **IV. 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 Scientific Advisory Board members than previous submissions.
- **V. Study Proposal** (five-page limit including the headings outlined below):
 - **1. Hypothesis and Objectives:** Please be precise and enumerate specific, testable hypotheses with realistic objectives to be met within the timeline and budget of the proposal.
 - **2. 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 to the field, the species/ breed and to other stakeholders. The literature review should indicate current status of research in the area, including the investigator's contributions. Technical terminology should be defined on first usage; acronyms and abbreviations may be used subsequently.
 - **3. Preliminary Data:** Succinctly describe any previous results by the investigator which support the proposed research. If this project is a continuation/next phase 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.

4. Experimental Methods and Design:

- Describe the experimental approach intended to meet each specific objective.
- Detail the design, experimental methods, number of animals, treatments, sampling schedules, potential pitfalls, and alternative approaches.
- A thorough description of proposed data analysis methods, including sample size calculations, must be included. Describe the method of power analysis using the Power Calculation Form (<u>click</u> <u>here</u>) and include this completed form after this section. This form does not count towards the 5 page limit.
- Applicants using client-owned animals must document that the institutional case load is adequate to provide the number of animals needed to complete the study as proposed. A copy of the

- client consent form to be utilized should be included as an addendum to the Animal Involvement Justification Form in section V.
- For drug studies, confirm the availability of the drug and the support of the manufacturer, if applicable. If the proposal involves the use of a new or newly applied pharmaceutical, justification of the dose and dosing schema is required.
- **5. Timeline:** Indicate the sequence and schedule of experiments as well as the duration of the project. A maximum of three years is permitted. All projects are subject to annual review, and approval of successive years is contingent upon approval of progress. Include sufficient time to complete data analysis for inclusion in the final report.
- **6. 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.
- **VI. Animal Involvement Justification** (no page limit): Please include the <u>required AIJ form</u> in your proposal, regardless of live animal involvement. If live animals are not utilized in the project, please respond "NA" in the appropriate place within the form.
 - Humane treatment of animals is of great importance to MAF and will be reviewed closely. Proposals not adhering to MAF's Health Study Animal Involvement Policy will be rejected.
- **VII. Recombinant DNA/Biohazards** (no page limit): Applicants using recombinant DNA techniques must confirm that they have complied with National Institutes of Health guidelines relative to 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 here any other potential biosafety concerns, including the use of radiation.
- **VIII.** 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 willingness to collaborate from the outside institution(s) must be included at the end of the proposal.
- **IX. Cited References** (three-page limit): Include complete citations referenced numerically in the body of the proposal. List article titles and all authors, with principal investigator name in bold when applicable.
- **X. Budget** (one-page limit): Use the <u>required form</u>. Include annual subtotals, calculated indirect costs and grand totals in all applicable fields.
 - Budget limits:
 - Fellowship training grant funding is limited to **salary support only**.
 - A maximum of two years of salary up to \$50,000 per year (including benefits and indirect costs) is allowed. Tuition is not supported by this award.
 - **Indirect costs:** MAF allows up to 8 percent of the budget to be applied to indirect costs, if your institution charges for these costs.
- **XI.** Itemized Budget Justification (one-page limit): Specifically justify the cost of each item in the budget. Costs not justified may not be approved. The role and percent effort of each individual for whom MAF funds are requested should be clearly defined.
- **XII.** Current and Pending support (no page limit): Other financial support for fellow and mentor(s). Please include all financial support (e.g., federal, nonfederal, commercial, institutional) currently available in support of the fellow's and mentor(s)'s research program. Overlap, whether scientific, budgetary or commitment of an individual's effort greater than 100 percent, is not permitted.

Current and Pending Support format:

- **1. Project Number:** If applicable, include a code, grant ID or other identifier for the project.
- **2. Source:** Identify the agency, institution, foundation or other organization providing support.
- 3. Title
- **4. Summary:** Provide a brief statement of the overall objectives of the project, subproject or subcontract.
- **5. 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.
- **6. Overlap:** Summarize any potential overlap with the proposed project regarding the science, budget or committed effort.
- XIII. Prior MAF support during the last three years (no page limit): If the principal investigator, mentor(s), fellow and/or co-investigator(s) have received MAF support in the past three years, provide the following information for each MAF award received:
 - **1.** MAF grant ID number
 - **2.** Title of the project
 - **3.** Amount and period of support (dates)
 - **4.** Brief summary of the objectives and results to date
 - **5.** List any extensions and reports due
 - **6.** List of the presentations and publications resulting from the award
 - **7.** List of patents resulting from MAF awards
- **XIV.** Biographical Data (two-page limit per individual): For the mentor(s), principal investigator, co-investigator(s) and fellow, provide the following information:
 - 1. Name
 - **2.** Position/role on this project
 - **3.** Current position (title, name, and address of institution)
 - **4.** Education/training (degrees, institution, year of graduation, field of study)
 - **5.** Previous positions and honors (include membership on any advisory committees)
 - **6.** Selected peer-reviewed publications (include titles, all authors, and complete reference)
- **XV. Letters of Support:** Include support letters from all collaborators (individuals or organizations not named as co-investigators whose participation is crucial to the project's success).