

# **PROPOSAL GUIDELINES**

## Dr. Rodney Page Canine Cancer Fellowship

## 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.

The Foundation's Golden Retriever Lifetime Study (GRLS) is a longitudinal cohort study that began in 2012 and includes 3,044 purebred golden retrievers. The Study was designed to investigate nutritional, lifestyle, environmental and genetic contributors to cancer in the cohort. Dr. Rod Page was the first Principal Investigator of the Study. He and the Study team partnered with dedicated pet parents, their loyal "hero" dogs and devoted veterinarians to provide data and samples over each dog's lifetime.

We are pleased to announce the availability of Fellowship Training awards to celebrate the contributions of Dr. Rod Page and the Golden Retriever Lifetime Study heroes. Fellowship Training proposals must focus on use of GRLS data and/or samples to study canine cancer. Research topics may include, but are not limited to: cancer epidemiology, biomarker studies, risk factors for cancer, and associations between genetic variations, potential risk factors and major health disorders in this cohort.

General information about banked GRLS specimens and available data can be found here: Golden Retriever Lifetime Study RFP | Morris Animal Foundation. It is strongly encouraged that applicants contact the GRLS data team at datateam@morrisanimalfoundation.org using this form during the planning of the grant proposal to ensure datasets and sample type(s) are available. Proposals including resource requests in which the PI has not coordinated ahead of time may be declined if feasibility is in question.

#### APPLICANT QUALIFICATIONS

Applicants must hold a veterinary degree (such as DVM) or a PhD at the time of the grant award. Awardees must devote at least 75% of their time to the research project. Clinical residents and those with clinical service requirements greater than 25% time are not eligible.

Applicants with a PhD must have earned the PhD within 4 years of the grant application date. Candidates who have held a PhD more than 4 years and other candidates in permanent salaried positions at the time of application are not eligible for a Morris Animal Foundation Fellowship. These researchers may wish to pursue a non-Fellowship Grant under the First Award mechanism.



All applicants 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 PI in response to this RFP is permitted.

## AWARD DURATION AND BUDGET LIMITS

The maximum duration of a Fellowship Training Grant is 24 months, and the total budget cannot exceed \$145,000.

## MORRIS ANIMAL FOUNDATION POLICIES

**Health Study Policy:** Projects must adhere to the Foundation's <u>Health Study Policy for Animals Involved in Research</u>. 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 <a href="mailto:this.link">this link</a>.

**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 impact 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 <u>FAQ page</u>, contact <u>grantapplications@morrisanimalfoundation.org</u>.



## **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 <u>Fluxx</u>. 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 <u>Fluxx Applicant User Guide</u>.

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 <a href="free-readability checker">free-readability checker</a> 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.

- 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.
  - i. **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 <a href="Excel budget template">Excel budget template</a>. Do not exceed the budget limits and timescales described on page 1 "Award duration and budget limits". The Foundation will allow a maximum of 8% of the budget's total direct costs to be applied to indirect costs (if charged by your institution). Note that the budget total is the total of direct and indirect costs.

## **Budget Limitations:**

- Salary: Budget is limited to two years of fellowship salary for the fellow only at \$60,000 maximum per year including fringe benefits.
- **Equipment:** Requests for equipment purchases may not exceed \$5,000 for the project. Equipment is long term assets as opposed to services or supplies which are consumable.
- Tuition: Morris Animal Foundation does not pay for tuition.
- Travel: Requests for travel to scientific meetings must be well-justified in terms of environmental and 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.
- 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 or exceeding the maximum associated project costs request quantified below. (Indirect Costs + Other Project Expenses may not exceed \$25,000 total). 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.
- Increasing Impact and Open Access Publications: The Foundation encourages
  Pls 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.
- Other Project Expenses: Up to \$25,000 in associated project costs can be requested, inclusive of indirect costs (Indirect Costs + Other Project Expenses may not exceed \$25,000 total). Briefly categorize other project expenses e.g., laboratory consumables; clinical care; reagents; non-equipment study supplies; service fees for specimen analysis. For all applicants seeking to use Golden



#### Retriever Lifetime samples, see below Sample and Shipping sections.

#### SAMPLES:

- For Academic or Non-Profit institutions only, there is no cost for use of GRLS samples. Only include a line item for sample shipping in the budget.
- For Industry Applicants, include the Foundation's quoted expense for samples in the budget. If awarded, samples will be provided by the Foundation at no cost, and the budget line item adjusted in the final contract award amount to cover the cost of shipping only.

#### SHIPPING:

- For sample shipment to a destination in the contiguous United States: Refer to the Sample Shipment cost Estimates Table 1 below to determine the relevant shipping expense, including sample retrieval fee, shipping, and supplies. Include the total cost as a budget expense. If awarded, shipping will be provided by the Foundation at no cost, and the budget line item eliminated from the final contract award amount.
- For international shipments or shipments outside the 48 contiguous United States: Email datateam@morrisanimalfoundation.org and indicate the types and numbers of samples you will be requesting and the shipment destination to receive an estimate. Include the quoted shipping cost as a budget expense. If awarded, shipping will be provided by the Foundation at no cost, and the budget line item eliminated from the final contract award amount.



<b>Table 1.</b> Golden Retriever Lifetime Study Sample Shipment Cost Estimates for the 48							
contiguous United States							
U.S.	Number of	Retrieval	Shipping	Shipping	Supplies	Supplies	
Shipping	Samples	Fee	Tubes	Tubes	Tubes	Tubes	
Destination		Per	<2ml*	>2ml⁺	<2ml*	>2ml⁺	
		Sample					
East Coast	<100	\$1.80	\$150-250	\$300-400	\$50	\$60	
East Coast	100-499	\$1.80	\$200-400	\$400-600	\$70	\$80	
East Coast	500-1000	\$1.80	\$400-600	\$600-800	\$90	\$100	
East Coast	>1000	\$1.80	\$600+	\$800+	\$110	\$120	
Midwest	<100	\$1.80	\$250-350	\$500-600	\$70	\$80	
Midwest	100-499	\$1.80	\$300-500	\$600-800	\$90	\$100	
Midwest	500-1000	\$1.80	\$500-700	\$800-1000	\$110	\$120	
Midwest	>1000	\$1.80	\$700+	\$1000+	\$130	\$140	
West Coast	<100	\$1.80	\$350-450	\$700-800	\$90	\$100	
West Coast	100-499	\$1.80	\$400-600	\$800-1000	\$110	\$120	
West Coast	500-1000	\$1.80	\$600-800	\$1000-1200	\$130	\$140	
West Coast	>1000	\$1.80	\$800+	\$1200+	\$150	\$160	
* Sample tubes less than 2 ml in volume include whole blood, urine, serum, DNA, hair, nails, and							
extracted RNA from RNALater tissue samples							

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.

† Sample tubes greater than 2 ml in volume include feces and tissue samples in RNALater Costs outlined are estimates and subject to change during the actual shipment process

- J. Budget Justification and Timeline Summary (2-page limit): [Find additional details about the budget justification here.] Use the budget justification form in the proposal template to provide details about other project expenses. Use the project timeline to demonstrate how the research objectives will be completed in the timeframe requested. Include data analysis time and manuscript preparation time.
- K. Current and Pending Support (No page limit): The Foundation wishes to support discrete research proposals that have not already received funding elsewhere. Fellowship Training Awards must be independent research projects. Please identify all active or pending support for the PI and Mentors. Where overlap, whether scientific or budgetary, may be perceived, please explain. 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.
  - i) Project ID, Funding Source, Start and End Date of Award
  - ii) **Project Title**
  - iii) **Summary:** Summarize the project objectives and results to date.



- iv) **Overlap:** Summarize any potential overlap with the proposed project regarding the science, budget or committed effort.
- **L. Biographical Data** (2-page limit per individual): include a bio-sketch for the PI and mentors. This might take the form of a resume/CV.
  - i) Name, Role on this Project
  - ii) **Current Position** (title, institutional affiliation, institutional address)
  - iii) **Education and Training** (degrees, institution, year completed, areas of emphasis)
  - iv) Previous Positions, Honors, Awards, Committee Assignments
  - v) **Selected Peer-reviewed Publications** (include titles, all authors, and complete reference)

### M. Letters of Support:

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.

- Candidate Letter of Intent: (2-page limit): address your educational background and training and research experience. Provide insight into your commitment and motivation for a career in animal health research. Describe your career vision and how this training award will assist in your progress toward becoming an independent investigator.
- Mentor Letter(s) (2-page limit per mentor): The mentor's letter will address the
  candidate's accomplishments, strengths, and motivation. Describe formal and
  informal opportunities for research mentorship and the mentor's history of
  guiding other researchers. Include list of mentees and their current positions.
  Describe the role of the mentor and the candidate in preparing and writing this
  application. The mentor is expected to have reviewed the applicant's final
  proposal prior to submission.
- **Department Head Letter:** (1-page limit): The department head's letter will confirm that the applicant is a full-time postdoctoral researcher or graduate student and that the applicant will be allowed adequate time to conduct the proposed research.
- Other Letters of Support: (2-page limit per letter): may include letters of support from collaborators or key suppliers of materials required for the project.
- **N. Training Plan** (1-page limit): Provide a detailed plan for mentoring, including career development and training objectives. Describe the institutional environment and how this environment will enable the Fellow to achieve independence as a research investigator.
- **O. Salary Verification** (1-page limit) Formal documentation from your institution's administration office showing approval of the requested annual salary and benefits based on the institution's salary scales. The salary request should include annual



salary, fringe benefits, and indirect costs.

**P. Unofficial Educational Transcripts:** Submit all transcripts in English beginning with Year 1 of veterinary or graduate training.

## 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 <u>Flesch Reading Ease Score</u> 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 budget template is provided in the proposal
guidelines and proposal template)
Candidate letter of intent
Letters of Support requested
Detailed Training Plan
Salary Verification
Transcripts translated into English
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 <u>Grants FAO</u>, please reach out to the Scientific Grants Program Team at <u>grantapplications@morrisanimalfoundation.org</u>