



Morris Animal Foundation Impact Plan (EXAMPLE)

E. Impact Plan (no page limit): The table below is your opportunity as an applicant to describe how this project will contribute to knowledge and potentially improve animal health in areas outside of the academic sphere. Morris Animal Foundation strongly encourages our research partners to design and conduct studies in ways that ensure the widest impact for our donor-sourced funding. Your impact plan should consider all important stakeholders, their potential involvement in the study itself, methods of communication, and areas in which awareness could be generated that might include the general public, pet owners, industry, government, the economy, organizations or clubs, or the general public. Plans for scientific publications and other academic endpoints should be included in the Expected Results section of the study proposal.

Impact Goal: Describe the overarching impact goal of your research in one sentence:

To involve and educate pet owners and veterinarians in development of biomarkers that will assist in making informed preventative and therapeutic choices for dogs with soft tissue sarcoma (STS).

<u>Impact Objectives</u>	<u>Planned Activities</u>	<u>Expected Beneficiaries</u>	<u>Intended Outcomes</u>	<u>Steps for Monitoring Progress</u>	<u>Attainability</u>
List two to three, in order of importance.	What actions will you take to achieve your objective including who is involved, timeline, and any collaborators?	Who will benefit or be an adopter, how will you communicate with them and/or involve them, how will this research meet their needs?	Will these be scientific, public awareness, environmental, species conservation, policy change, economic and/or industry applications?	What are the steps you will take to operationalize impact, monitor and evaluate progress?	Describe your track record, potential to achieve impact, expertise, potential partners and stakeholders. For new investigators, describe the track record of mentors and/or collaborators.
1. Directly involve owners of canine patients diagnosed with STS in the oncology biomarker research process.	<ul style="list-style-type: none"> Recruit owners (n=██) for the study through our University Small Animal Oncology Service, mailing lists, our University website, and traditional media (via our Corporate 	<ul style="list-style-type: none"> Dog owners and their veterinarians will receive the histopathology report at no cost, information on the biomarkers we are testing, and (opt-in) follow-up news including how we 	<ul style="list-style-type: none"> Scientific – owner participation will be integral to the study. Owner awareness – the importance of STS. Their variable but biological 	<ul style="list-style-type: none"> We already have systems in place to recruit owners/patients to research projects through both our own hospital and veterinarians with an established relationship with us (referral or via the pathology laboratory). We will be recording owner 	<ul style="list-style-type: none"> In our preliminary work we easily recruited 10 clients to this study, 3 of whom donated funds for our research. One of our teams is Head of our Oncology Service, and another is Head of Soft Tissue

	<p>Communications team). This will occur over the first 2 years of this 3-year project.</p> <ul style="list-style-type: none"> • Provide access for those owners to educational and research update information via direct emails, a website and social media (Facebook, Twitter). This will be performed by the postdoctoral associate in coordination with the Principal Investigator and will run for the study duration only. 	<p>used both the cells isolated from the donated specimen and that pathology information. We will work to make these owners feel involved in the study if they wish to be (at any stage) and will seek any ongoing medical information that they wish to provide. We will communicate directly where possible, as well as via email and social media.</p>	<p>behavior, and the need for better prognostic markers.</p>	<p>uptake according to milestones (and our power calculations) and extending our reach if required through our media office and other stakeholders (see aim 2).</p> <ul style="list-style-type: none"> • Our website is up and running (www.██████████) with linked Facebook and Twitter accounts (@██████████), and we monitor landing and conversion rates using Google Analytics. The free site was set up on https://www.wix.com/. This website can receive comments/messages, which link to a project email address. 	<p>Surgery – we receive eligible cases every week, and those team members have direct contact with the clients.</p> <ul style="list-style-type: none"> • Dogs have previously been successfully recruited to STS tumor drug trials by one of teams (see Preliminary Data section). We have ongoing relationships with a network of referring practices and through Continuing Education events run on a monthly basis at our hospital. • We have expertise in website design, Google Analytics (certified) and in social media, having previously run a research-focused website and associated Twitter feed that has 5000+ followers (@██████████).
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<p>2. Provide evidence to pet owners and breed stakeholders of application of scientific methods for canine oncology prognosis and/or therapy with the same standards as those being used for human patients.</p>	<ul style="list-style-type: none"> • Further develop and run a website (www.██████████) with an infographic approach and interactive elements – this will include digital microscope slides integrated into video presentations. Those presentations will use real ‘dog tales’ to explain the problems, pathology, scientific approaches to generating better biomarkers (including implications for therapeutic decisions), and similarities to initiatives in the (human) medical field. The website is already running and these further materials will be prepared by the team throughout the 3-year project. • Hold an exhibition in the newly 	<ul style="list-style-type: none"> • Dog owners including breed club members. This initiative will provide education in an engaging way on early detection of one of the most common canine cancers, how variable the behavior of this cancer can be, and what tools are available to assist with clinical decision-making – in addition to emphasizing the parallels between cancer biomarker research for human and canine patients. We will communicate with owners as detailed above. For breed clubs, we have an agreement to recruit patients through their membership lists and websites, and to publicize our website and results through their outreach 	<ul style="list-style-type: none"> • Public awareness – dog owners, breed club members, general public (museum attendees). 	<ul style="list-style-type: none"> • As above, our website is already live and monitored using Google Analytics. Monitoring will include the video content, with further optimization if necessary, e.g if certain videos are not being engaged with or viewers are exiting early. • Video recording and editing services are available free of charge at our University. • We already have a digital microscopy platform up and running in our Veterinary School. It can be accessed dynamically via a web-link – this ‘conversion rate’ can be monitored. 	<ul style="list-style-type: none"> • As above, we have previous experience in website and social media applications. • ██████████ has social media expertise, with 2000+ LinkedIn connections and a Twitter following of 5000+. • We already have agreements with the Kennel Club of ██████████, and the ██████████, with which some members of our team have had previous, similar interactions. See letter of support.
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	<p>established “Science [REDACTED]” area of our University-based museum. This will be prepared by the team in conjunction with museum staff (see letter of support) in the 3rd year of the project.</p>	<p>departments (see attached letters of support).</p> <ul style="list-style-type: none">• General public visiting our University museum – the interactive exhibition will include iPads to encourage linking to our virtual microscope and other aspects of our website – these will be loaded with the [REDACTED] web-browser application to ‘kiosk-ify’ the experience. Again, the aim is to increase awareness of how common canine cancer is and what STSs are, with the aim of early detection, prompt clinical attention, and consideration of biomarker research efforts.			
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<p>3. Provide research information to an international pet healthcare company that is sufficient to generate further validation studies for diagnostic use of one or more STS biomarkers.</p>	<ul style="list-style-type: none"> • Generate data indicating potential use of one or more biomarkers (potentially p[redacted] and p[redacted]) for prognostic or diagnostic use and discuss it with a an already-identified private sector partner. This is projected to occur towards the end of the 3rd year if such data is an outcome of the study. 	<ul style="list-style-type: none"> • Healthcare industry, veterinarians, pet owners. Current canine STS biomarkers have limited prognostic or therapeutic application. 	<ul style="list-style-type: none"> • Industry application. 	<ul style="list-style-type: none"> • Should any of the biomarkers show promising results, which would be expected in the third year of the study, success would be any agreement to enter into a larger (validation) study using samples from the private sector partner. 	<ul style="list-style-type: none"> • We already have a partnership agreement with this partner ([redacted]) – this company provided the samples from which we generated the preliminary data for this application. See letters of support.
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