**ESTIMATE FOR STATISTICAL CONSULTING SERVICES**

**Date:** 03/06/2023

**To:** Rebecca Egbert

**From:** Sichao Wang

**Case #:** C1232

**Bid #**: B1072

**Client Type:** Internal

**Client College:** Veterinary Medicine

**Client Position:** Research Staff

**Project title:** Iodine and canine hypothyroidism

**Project period:** 06/01/2023 – 06/01/2024

**Background & Objectives**

This project investigates the relationship between iodine and thyroid disease in dogs through the following aim: Aim 1: Determine serum iodine concentrations in normal dogs and dogs with autoimmune thyroiditis and hypothyroidism. Aim 2: Characterize historical trends in canine hypothyroidism using retrospective testing data.

This document describes our bid to provide the requested statistical support. We have aim to provide a flexible approach to achieving the project objectives.

**Scope of Work**

We are prepared to partner with you by performing services as described in this document. Our work on this will include the following activities and tasks.

1. *Project coordination and communications*. We will communicate with you in meetings, by phone, videoconference, and email to complete the project. These communications may include discussions about methods issues, tasks, timelines, interpretation of results, and so on. Across various task categories below, we will work with you to plan which tasks will be assigned to CSTAT personnel and which will be assigned to other team members.
2. *Recommend methods.* Our goal will be to provide credible evidence pertaining to your questions and hypotheses. We will recommend statistical methods that are appropriate to your research and evaluation questions, feasible to implement, and defensible. We will discuss analysis options with you and collaboratively select which ones to pursue.
3. *Data management*. We will perform data management tasks that may be required to prepare the data files for use in the planned analyses.
4. *Data analysis & interpretation*. We will conduct statistical analyses to implement the chosen analysis plan, then help you interpret the results.
5. *Contribute to research and evaluation products*. We will write parts of your manuscripts, reports, or other research and evaluation products, especially the quantitative methods and results sections. This may include creating tables and figures.
6. *Review literature*. We will read scientific literature relevant to the project, primarily about the statistical methods and issues that pertain to your research and the analyses that we plan to use. We will rely on you (and other coauthors) to provide subject matter expertise. If there are papers or other materials that you think we should read to better understand the nature and context of the work, please recommend them to us and we will read them.
7. *Respond to review feedback*. We will help you respond appropriately to reviewer feedback. This may include revising manuscripts, conducting new analyses, contributing to response letters, etc.

**Project Period, Staffing, and Schedule**

The project period will be 06/01/2023 through 05/31/2023. We will assign a research assistant (Ms. Sichao Wang, 5.0% FTE).

We will discuss more specific tasks and deadlines with you throughout the project. A recurring weekly or bi-weekly team meeting may be a good venue for doing that.

**Deliverables**

Authorship credit on deliverables and products derived from them shall appropriately reflect the intellectual contributions of each individual.

1. Advice and recommendations may be delivered via email, documents, in meetings, and during calls.
2. Data management and statistical analysis plans delivered via email, documents, in meetings, and during calls. These will be developed through collaborative discussions about the project work. We can catalog the decisions made throughout the project via email, memos, and meeting notes as needed.
3. Written contributions to other scholarly products such as manuscripts, reports, and presentations (if requested). We will focus on describing the methods, results, and conclusions from our quantitative analyses in scholarly products where they are used, but we may also review and suggest edits to other sections. We can include formatted tables and publication-ready figures, plus citations for supporting literature.

**Cost & Payment Terms**

We will charge your grant accounts to recover personnel costs (salaries/wages plus benefits) for Ms. Wang at 5.0% FTE for the duration of the project period. We will also charge some software fees.

The attached Excel file shows that the direct costs for CSTAT’s services will be $6,456. Those direct costs will not incur any associated indirect costs (because this is an internal grant). CSTAT will submit transactions in EBS to bill the MSU account(s) identified below.

**Budget Justification**

Personnel costs include salaries budgeted according to the FTEs allocated for each person assigned during each phase of the project. It is MSU policy to use the Specific Identification method to calculate fringe benefit amounts. Fringe benefits include FICA, worker’s compensation, health insurance, dental insurance, retirement, life insurance, longevity pay increments, disability insurance, unemployment insurance and tuition remission.

CSTAT maintains a suite of specialized, state-of-the-art statistical software for use in grant-funded work, allowing for added flexibility and security in our data analysis. We charge software fees based on total annualized personnel effort devoted to the project ($300/year if total FTEs > 5%, otherwise $150/year). This software cost has been allocated to the budget.

***Disclaimer.*** *The CSTAT research team provides recommendations given the background information received but will not be held liable for the use of these recommendations or if the client does not achieve the intended results.*

**Client Responsibilities**

CSTAT will rely on you as a subject matter expert. Your participation is necessary to achieve good results on this project. You will be responsible for answering our questions and providing documents and other inputs we need to do the work. For example, we may ask you for raw data files, analysis scripts, or output files you have produced. You will also be responsible for reviewing deliverables and providing us with feedback about them. Timely responses from you will help us keep the project on schedule.

**CLIENT ACCEPTANCE**

You may accept this bid by answering the payment question below, signing this form, and sending it back to CSTAT. Accepting the bid means you are certifying that you will pay for services received.

**How you will pay for services?** (choose an option and provide billing information).

[x] Internal billing to MSU accounts.

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| 1st Account No.: |  |
| 1st Accounting String\* |  |
| 1st Billing Period: |  |
| 2nd Account No.: |  |
| 2nd Accounting String\* |  |
| 2nd Billing Period: |  |
| 3rd Account No.: |  |
| 3rd Accounting String\* |  |
| 3rd Billing Period: |  |
| Fiscal Officer: |  |
| Email: |  |
| Phone: |  |

\* Please include any accounting string details (e.g., subaccount) required for EBS transactions.

**Signature**

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Client Signature Date