# My proposal

a study of awesomeness



Research proposal by Bob Hette 2024-12-10

Thesis Advisory Committee members:

Julien Martin (supervisor) member 2 (TAC member) member 3 (TAC member) member 4 (external examiner)

A proposal submitted as a partial requirement for a PhD degree at the University of Ottawa, Department of Biology

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#### Introduction

It provides the scientific basis for the study and a (brief) review of the current literature, the key question(s) for you research leading -up to the next section about your specific hypotheses or objectives.

This template is developed for Quarto (Allaire et al. 2022). You can add tables, figures and code using R (R Core Team 2023), Python, Julia or Observables. For more info, go to the Quarto website <a href="https://quarto.org/">https://quarto.org/</a>

## Research objectives and hypotheses

Specific hypotheses (in the case of hypothesis-testing science) or objectives (in the case of descriptive science), and the underlying logic, for each proposed thesis chapter (minimum three for PhD students)

## Proposed methodologies

Include outlines of data collection and data analysis

Outline any special skills, equipment, or techniques that will be required.

In case you want to add a wide table that needs to be on a landscape page you can do like in Table 1. Have a look at the qmd for the code.

You need to put the table in a pandoc div (delimited by :::) indicating the side way rotation

It also works for figures just use sidewaysfigure instead of sidewaystable

# **Expected Products**

A list of the (usually 1/3) articles expected for completion of the MSC/PhD. Think of each as a fantasy abstract.

- 1. The Evolution of Human Uniqueness. Bob Hette & Julien Martin.
  - There is wide agreement that humans are unique. But it is rarely asked: Have they always been unique? In this paper, we derive a general uniqueness theorem that states that any unique species must have been less unique at some point in the past. This theorem has implications for the achievement of world peace.
- 2. Niche Construction, Disease Transmission, and Global Warming: Chaos Deconstructs the Block Chain. Bob Hette, Igor Tex & Julien Martin
  - How many buzz words can be combined in a title? In this paper, we find that the natural limit on buzz words in any specific scholarly field is always given by the triangular number  $T_n$  where n is one more than the number of tenured faculty in the field.

17,95 1,3949,9513,26 currency 65 100,00 1325,81Friday, February 2, 2018 Saturday, March 3, 2018 Wednesday, June 6, 2018 Saturday, July 7, 2018 datetime Wednesday, April 4, 2018 Saturday, May 5, 2018 NAMonday, January 1, 2018 Table 1: This is a wide table time 14:40 15:45 19:10 13.3516:50 17:55 NA20:20 date lun. 15/06/2015jeu. 15/01/2015dim. 15/03/2015ven. 15/05/2015NAsam. 15/08/2015dim. 15/02/2015mer. 15/04/2015eight three seven four five  $\operatorname{fctr}$ one two $\sin$ grapefruit honeydew coconut banana apricot durian char NAfig 2,22444,40 NAnum 33,33 $5\,550,00$ 777 000,00 8 880 000,00  $\operatorname{grp}_{-}\mathrm{b}$  $grp\_a$ row 7  $_{-}^{8}$  $row_3$  $row_4$  $6^{-0}$  $row_{2}$  $row_1$ row

NA0,44 3. A Bayesian Hierarchical Survival Analysis of Counting Sheep. <u>Bob Hette & Julien Martin</u>
Just like all those other models of counting sheep, but this one will be Bayesian.

## Scientific value and rationale for the research

# **Course selection**

## **Schedule**

Outline of the calendar for the work. This is necessarily rough and subject to change. Usually include a Gantt chart

#### Completed to date

Six month plan

# References

Allaire, J. J., Teague, C., Scheidegger, C., Xie, Y., and Dervieux, C. (2022), "Quarto." https://doi.org/10.5281/zenodo.5960048.

R Core Team (2023), R: A language and environment for statistical computing, Vienna, Austria: R Foundation for Statistical Computing.