**Identification:**

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**Application title:**

**Trees are useful on a university campus.**

**Field of research:**

ecology   
(put a key term such as ecology, environment, health etc. grant agency provides a full-down menu with terms)

**Proposed start date of program of study:**

Sept 2021.

**Keywords**

List a few.

**Plain language summary (< 1800)**

Trees are useful. Trees are keystone species because…. Then define key concepts and what we know about the ecology of trees, forests, etc. Keep it simple for plain language summary. State propose and hypothesis. The purpose of this research project is to….. fill the gap… ie we know trees do this and that BUT we do know know what they do in an urban campus setting. The hypothesis that…. Will be tested. Then state methods in a sentence or two. Then state anticipated findings. End with implications and how it connects to other research…. Trees are likely keystone species on the campuses of some universities, particularly in temperate climates, because they support biodiversity, buffer noise and disturbance, capture carbon, and importantly as proposed here also positively benefit the students and staff on a campus by… etc.

Formatting throughout is single spaced, 12 point font.

Official instructions here: <https://www.nserc-crsng.gc.ca/ResearchPortal-PortailDeRecherche/Instructions-Instructions/CGS_M-BESC_M_eng.asp>

**Outline of proposed research (maximum of one page)**

Background

Straight from the guidelines online: Provide background information to position your proposed research within the context of current knowledge in the field

So, Biodiversity is an important component of many urban and suburban university campuses. In temperate climates for instance, trees including those that line the street and walks and urban woodlots comprise a significant component of the vegetation… etc topic - then get to trees are useful, they do this and that.. BUT we do not know this… and I will study that…

Hypothesis

then state hypothesis… Trees in sufficient density on a university campus provide important social and health benefits to students and staff on campus.

Outline of design

Very briefly state the ‘design’ ie you will use direct and indirect measure of human well-being on campus near and far away from trees at different densities… short just 2 sentences - show off your experimental design knowledge here too if you want by using a randomized block design etc..

Methods

Then methods - you will measure people directly physiologically, survey them via an online poll, and explore if single trees versus higher density patches provide the most benefit by measures how people move where they stop etc… then show off experimental design - ie direct measures - heart rate monitor or those blood oxygen meters you clip on finger for 300 people, then survey 2000 people over two years, then do direct observation of how fast people walk etc with and without trees..

Significance

then end if with implications. State what you think you will find, why it is important, how it connects to what we know, and perhaps/and or even state next steps - ie how people will use this - ie they need to plant more trees but do so in patches of at least 10 trees etc. to provide the optional benefit for the humans on campus.

**Literature cited**

In the main text, cite the papers with numbers in the order you need the ideas… Trees are important in ecology… (1,2).

Then, here you format like this..

1. Authors, year, title of paper. Journal name, Vol, pages.
2. Etc
3. Etc
4. Etc
5. Etc