**Student Research Plan Template**

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## PROJECT INFORMATION

**Student Name(s):** Click or tap here to enter text.

**Student School:** Click or tap here to enter text.

**Title of Project:** Click or tap here to enter text.

**Category:** Choose an item.

**Team Project (yes or no):** Choose an item.

**Date you plan to start:** Click or tap to enter a date.

**AlWAYS USE COMPLETE SENTENCES AND ANSWER THE FOLLOWING**

**Research Location:** *(Where do you plan to do your research check all that apply)*

Home

School

Regulated Research Institution (i.e. University Lab etc.)

Place of Business, Commercial Property or Industrial Setting

Field or Other Public Location (i.e. City Park, Lake, River, Shopping Mall etc.)

Other (Neighbor’s house, mentor’s house etc.)

Other: Type your response here.

**Location Address:** *(For each location above, list the name and give the street address if available, or if not give location description or GPS coordinates)*

Click or tap here to enter text.

**Rationale:** *(Why is this project important? Include a brief summary of the background that supports your research problem and explain why this research is important scientifically and if applicable, explain any societal impact of your research.)*

Click or tap here to enter text.

**Hypothesis/Engineering Goal:** (*State your HYPOTHESIS(ES), RESEARCH QUESTION(S), ENGINEERING GOAL(S), EXPECTED OUTCOMES. How is this related to your reasons for choosing this project?)*

Click or tap here to enter text.

**Materials:** *(List the materials you will be using, including chemicals and amounts and concentrations. Include where you purchased any bacteria or other potentially hazardous biological agents. If you used E. coli k-12, make sure to list that as the material.)*

Click or tap here to enter text.

**Procedure:** *(Describe in detail all procedures and experimental design including methods for data collection, and when applicable, the source of data used.* ***Describe only your project. Do not include work done by your mentor or others.*** *If you will use published surveys, questionnaires or tests, describe how you obtained these, including required permission if applicable.)*

Click or tap here to enter text.

**Risk and Safety:** *(Identify any potential risks and safety precautions needed.)*

Click or tap here to enter text.

**Data Analysis:** *(Describe how you will analyze or compare your data to determine your results. (Will you use tables, graphs or formulas?)*

Click or tap here to enter text.

### Bibliography:

**Type in your Bibliography:** *(Must have at least 5 valid sources, use APA format)*

Click or tap here to enter text.

### Extra Information:

Choose the appropriate sections needed for your project. Then fill out those sections on the following pages.

* [**Human Participant Studies**](#_3dy6vkm)
* [**Vertebrate Animal Studies**](#_4d34og8)
* [**Potentially Hazardous Biological Agents**](#_17dp8vu)
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* [**Continuation Projects**](#_1ksv4uv)

## HUMAN PARTICIPANT STUDIES (*complete if applicable, this includes studies where the researcher is a participant*)

**Participant Details:** *(Describe who will participate in your study (age range, gender, racial/ethnic composition). Identify any vulnerable populations (minors, pregnant women, prisoners, mentally disabled or economically disadvantaged)*

Click or tap here to enter text.

**Recruitment:** *(Where will you find or get your participants?)*

Click or tap here to enter text.

**Consent:** *(You need to get permission from your participants and inform them of your study, will it be Verbal or Written?)*

Click or tap here to enter text.

**Activities:** *(What will participants be asked to do?)*

Click or tap here to enter text.

**Time:** *(How long will it take for each participant to participate?)*

Click or tap here to enter text.

**Surveys:** *(Will you be handing out any surveys, questionnaires or tests? If so you will be asked to provide a sample copy of the survey or test in PDF Format)*

Click or tap here to enter text.

**Risks:** *(What are the risks or potential discomforts: physical, psychological, social, legal, etc.?)*

Click or tap here to enter text.

**Minimizing Risk:** *(How will you minimize or reduce any potential risk?)*

Click or tap here to enter text.

**Benefits:** *(How will this study be beneficial?)*

Click or tap here to enter text.

**Privacy:** *(Will you collect any personal data from your subjects (name, address, photos, etc.?)*

Click or tap here to enter text.

**Information Storage:** *(How will you store and protect the participant’s private information?)*

Click or tap here to enter text.

**Information Disposal:** *(What will you do with the participant’s personal data at the end of the study?)*

Click or tap here to enter text.

## VERTEBRATE ANIMAL STUDIES (*complete if applicable*)

**Alternatives:** *(Discuss possible alternatives to vertebrate animal use and justify why your project requires the use of vertebrate animals.)*

Click or tap here to enter text.

**Kind of Animal:** *(Give the common name or genus and species of the animals you will be using)*

Click or tap here to enter text.

**Description:**  *(Describe the animals you will be using, sex, age, etc.)*

Click or tap here to enter text.

**Numbers:** *(Give the number of vertebrate animals that will be involved in your study and why you chose that number)*

Click or tap here to enter text.

**Source:** *(Where and how will you obtain the animals?)*

Click or tap here to enter text.

**Procedure:** *(Describe in detail the exact procedure you will be using on the vertebrate animals)*

Click or tap here to enter text.

**Dosages:** *(Give detailed chemical concentrations or drug or food dosages that you will be using if applicable)*

Click or tap here to enter text.

**Discomfort:** *(Explain the ways you will minimize pain and/or discomfort for the animals)*

Click or tap here to enter text.

**Husbandry:** *(Describe how and where the animals will be kept. Include bedding, cage, type of food, frequency of food and water etc.)*

Click or tap here to enter text.

**Disposition After Experimentation:** *(What will happen to the animals when you are done with your study?)*

Click or tap here to enter text.

**Note: Licensing and other Documentation** *(if applicable)***:**

(You will be required to provide a copy of any licensing required by state, local or federal law i.e. fishing license etc. if applicable, in PDF Format)

(You will be required to provide a copy of the IACUC documentation in PDF Format if the study was performed in a research institution. The student name must be on the IACUC or on a letter from the IACUC showing that the student was trained and authorized to work on the project.)

## POTENTIALLY HAZARDOUS BIOLOGICAL AGENTS (*complete if applicable*)

***Projects in this section can NOT be done at HOME!***

**Biosafety Level:** *(What have you determined your Biosafety Risk Level to be? BSL-1 or BSL-2)*

Click or tap here to enter text.

**Biosafety Determination:** *(How did you determine the biosafety level of this project?)*

Click or tap here to enter text.

**Identification:** *(Identify the potentially hazardous biological agents or micro-organisms to be used. Include the source, catalog number, quantity etc. and biosafety level group for each microorganism)*

Click or tap here to enter text.

**Laboratory Environment:** *(Describe the laboratory and setup and include the level of biological containment “BSL-Level”)*

Click or tap here to enter text.

**Minimizing Risk:** *(Describe the procedures that will be used to minimize risk: protective equipment, gloves, hoods, etc.)*

Click or tap here to enter text.

**Disposal:** *(Describe the methods of disposal for all cultures and hazardous biological agents (i.e. autoclave, bleach, etc.)*

Click or tap here to enter text.

### Vertebrate Animal/Human - Bodily Fluids/Tissue (complete if applicable,)

**Identification:** *(What vertebrate animal tissue will be used in this study? Check all that apply)*:

**Fresh or Frozen Tissue Sample**

**Fresh Organ or Other Body Part**

**Blood**

**Primary Cell/Tissue Culture**

**Human or Other Primate Established Cell Lines**

**Source:**  *(Where will the tissue be obtained? (include source and catalog number if using established cell lines)*

Click or tap here to enter text.

**Tissue from Research Institution:** *(Complete if the tissue will be obtained from a vertebrate animal study conducted at a research institution)*

* **Title:** *(Type in the title of the study at the Research Institution)*

Click or tap here to enter text.

* **IACUC:** *(Type in the IACUC approval number)*

Click or tap here to enter text.

* **IACUC Date:** *(Type in the IACUC approval date)*

Click or tap here to enter text.

* **Note:** *(You will be required to upload a copy of the IACUC documentation in PDF Format)*

Click or tap here to enter text.

## HAZARDOUS MATERIALS/ACTIVITIES/DEVICES (*complete if applicable*)

**Risk:** *(Identify and assess the risks involved in this project)*

Click or tap here to enter text.

**Safety:** *(Describe the safety precautions and procedure you will use to reduce the risk)*

Click or tap here to enter text.

**Details:** *(List all hazardous chemicals, activities, or devices be sure to include any chemical concentrations or dosages; also identify any microorganisms exempt from pre-approval that you will be using if applicable).*

Click or tap here to enter text.

**Sources of Safety Information:** *(List all sources of safety information: product labels, teacher, MSDS, etc.)*

Click or tap here to enter text.

## CONTINUATION PROJECTS (*complete if applicable*)

**Previous Year:** *(Select the previous year’s research)*

**2022-2023 Season**

**2021-2022 Season**

**Previous Year’s Project Title:**

Click or tap here to enter text.

**Research Goal - Current Year:**

Click or tap here to enter text.

**Research Goal – Previous Year:**

Click or tap here to enter text.

**Method/Procedure Summary – Current Year:**

Click or tap here to enter text.

**Method/Procedure Summary – Previous Year:**

Click or tap here to enter text.

**Variables to be Tested – Current Year:**

Click or tap here to enter text.

**Variables Tested – Previous Year:**

Click or tap here to enter text.

**Additional Changes/Differences – Current Year:**

Click or tap here to enter text.

**Additional Changes/Differences – Previous Year:**

Click or tap here to enter text.

**Note:** *(You will be asked to provide a copy of previous year’s Research Plan & Abstract in PDF format)*