**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)
* [**Hazardous Materials/Activities/Devices**](#_lnxbz9)
* [**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)*