Research Plan Template

The Research Plan/Project Summary is a succinct detailing of the rationale, research question(s), methodology, and risk assessment of your research project and should be completed before the start of your experimentation. Any changes you make to your study should to be added to the final document. The research plan for ALL projects should include the following:

- What is the **RATIONALE** for your project? Include a brief synopsis 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.

- State your **HYPOTHESIS(ES), RESEARCH QUESTION(S), EXPECTED OUTCOMES**. How is this based on the rationale described above?

- Describe in detail your **RESEARCH METHODS AND CONCLUSIONS**.
    a. **Procedures**: Detail all procedures and experimental design including methods for data collection. Describe only your project. Do not include work done by mentor or others.

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

    c. **Data Analysis:** Describe the procedures you will use to analyze the data/results that answer research questions or hypotheses.

- **Bibliography:** List at least five (5) major references (e.g. science journal articles, books, internet sites) from your literature review.

Human Participants Research

For projects including Human participants research, include the following:

In your research plan, **DIRECTLY STATE:**

- Participation is voluntary and participants have the right to stop at any time.
- Participants will be informed and give consent for participation in the project by reading and signing the Informed Human Consent Form prior to experimentation.
- Participant anonymity will be maintained by….(*then describe your procedures for not collecting personal information)*

• **Participants**. 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).

• **Recruitment.** Where will you find your participants? How will they be invited to participate?

• **Methods.** What will participants be asked to do? Will you use any surveys, questionnaires or tests? What is the frequency and length of time involved for each subject?

• **Risk Assessment**

a. **Risks.** What are the risks or potential discomforts (physical, psychological, time involved, social, and legal, etc.) to participants? How will you minimize the risks?

b. **Benefits**. List any benefits to society or each participant.

- **Protection of Privacy**. Will any identifiable information (e.g., names, telephone numbers, birth dates, email addresses) be collected? Will data be confidential or anonymous? If anonymous, describe how the data will be collected anonymously. If not anonymous, what procedures are in place for safeguarding confidentiality? Where will the data be stored? Who will have access to the data? What will you do with the data at the end of the study?

- **Informed Consent Process**. Describe how you will inform participants about the purpose of the study, what they will be asked to do, that their participation is voluntary and they have the right to stop at any time.

Potentially Hazardous Biological Agents Research

For projects including potentially hazardous biological agents, include the following:

- Describe Biosafety Level Assessment process and resultant BSL determination

- Give source of agent, source of specific cell line, etc.

- Detail safety precautions

- Discuss methods of disposal (research and align with local disposal regulation)

Hazardous Chemicals, Activities & Devices

For projects including Hazardous Chemicals, Activities and Devices, include the following:

- Describe Risk Assessment process and results

- Detail chemical concentrations and drug dosages

- Describe safety precautions and procedures to minimize risk

- Discuss methods of disposal (research and align with local disposal regulation)