



## Questions for Scientific Research Proposals

Ask yourself the following questions when proposing a research project in the natural or social sciences.

### What?

What do you want to examine? In one or two sentences.

- Be able to explain your research to a layperson and a specialist.
- Give *your* definitions!

### Why?

Why is this topic of interest to the researcher (you)?

Why exactly should someone care about your research?

Why should I (NSF, etc.) fund your research?

What are the social implications of the possible outcome(s) of your research?

### How?

OK, so say you have the funding, now how are you doing to perform your “experiment” or “research”?

Are you using human subjects?

- If so, male or female?
- All ethnic groups?
- Ages?
- Socio-economic classes?

CONTROL & ISOLATE only the variables you (the researcher) want to examine

So now you have funding and your subjects. What are you going to do with your subjects?

- Survey?
- Questionnaire?
- Just follow them around?

Are you going to develop this? Or are you retrieving a protocol that has already been produced?

Quantitative or qualitative? (a lot of subjects or a few subjects?)

Length? (10 minutes or 10 years?)

OK, you have compiled all of your data. What are you going to do with it?

- What are the numbers or observations going to suggest?
- What's the plan?
- Set up more definitions.

### Expected Results

What do you expect your data will suggest?

Why?

**CAUTION:** This is just a broad basis of the elements an undergraduate scientific research proposal should have. There may be specific elements that students need to include in order to meet the requirements of their assignment.