

Writing an Undergraduate Research Proposal

Career Preparation Series | Toxicology Student Association (ToxSA) | toxsa.berkeley.edu

Why should you want to conduct your own research project?	
<ul style="list-style-type: none"> • Strengthens your interdisciplinary and technical skills • Preparation for graduate school: research, medicine, pharmacy, dentistry, etc • Preparation for technical jobs: allows you to apply concepts from class to bench top work and is a good experience to talk about when interviewing 	
Abstract	<ul style="list-style-type: none"> • Briefly explains what you will be doing, how you will do it, and why you are doing it • This section should be brief, clear, and easy to understand because it should explain to the person reading your proposal who may not have the technical knowledge to understand everything you write. • The length should be one paragraph maximum
Introduction	<ul style="list-style-type: none"> • This section is an extension of your abstract: <ul style="list-style-type: none"> ○ Why you will be researching this topic: What problem does the research address and how this research contributes to the existing knowledge (benefit to society) ○ How you will you conduct this research: How will the research achieve the questions you have outlined? • The introduction explain the background of your research topic • Use citations from previous publications that support your need for research into this topic
Objectives/Hypothesis	<ul style="list-style-type: none"> • By now the goals should have been clearly defined, if not, rewrite. • The hypothesis is the burning question of your project: <ul style="list-style-type: none"> ○ "I theorize that the ____ will/will not ____."
Materials	<ul style="list-style-type: none"> • List the materials you will need, where you will buy it from, and the estimated cost for each item • At the bottom, add the sum total for the project
Methods	<ul style="list-style-type: none"> • Explains to the reader what research skills and methodology you will be using • Addition support: Current knowledge of lab skills you will be using • Anticipate any problems that you think may arise during project
Expected Results	<ul style="list-style-type: none"> • Explain what you are hoping to find from this project and the timetime of your project
References	<ul style="list-style-type: none"> • Citations include: Name of Researcher, Title of Paper, Database Used, Date Published and Date Accessed
Additional Tips	<ul style="list-style-type: none"> • Make sure you proofread your proposal. Grammar errors and punctuation errors reflect negatively upon the reader. • Ask the professor or graduate student who will be mentoring you to read over the proposal to make sure that they can understand what you have written. • Remember to go over the guidelines for each program you are applying to because they have specific criteria for what they what in your proposal