

Breaking Down the UROP Symposium Abstract

1. Begin with your problem, purpose, or context

You always want to give your reader a way to understand the point of your project. Providing them with a problem you hope to address, the purpose behind your project, or the context for the work you're doing is crucial.

Here's an example problem/purpose/context for a project in STEM fields:

“The marine mollusk *Aplysia* responds to noxious stimulation with a stereotyped arousal reaction that includes escape locomotion, increased heart rate and sensitization of defensive reflexes. Although previous studies have shown that serotonin (5-HT) is important for most of these behavioral responses, it is still unclear how the 5-HT system is activated in response to noxious stimuli.”

Here's that same opening move, but as it appears in a Humanities project:

“Uruguayan writer Cristina Peri Rossi's first book, *El libro de mis primos* (The Book of My Cousins, 1969), is compared with her later novel, *La nave de los locos* (The Ship of Fools, 1984), to suggest how an authoritarian society can be criticized through parody and then rebuilt on the foundations of a philosophy of ambiguity, similar to Lyotard's vision of the postmodern. Dissatisfaction with the power structures of tradition and validation of marginality are characteristics of such vision, which inscribe Peri Rossi in the postmodern current of Latin American literature.”

Finally, let's see how the problem/purpose/context gets set up in a Fine Arts project:

“In the ceramic work of Scandinavian artist Arne Aase, water-soluble materials such as titanium sulphate, cobalt chloride, tungsten oxide, molybdenum chloride, and selenium chloride are utilized as decorative elements on his porcelain forms. Such chemicals are not of common use in the ceramic arts because of the expense of the raw materials and the possible hazards of working with these chemicals. However, these colorants can create subtle yet breathtaking effects, including hues of black, blue, yellow, or pink, that blend with the surface of the clay, as if the porcelain vessel were a watercolor painting.”

2. Establish the methods, process, or theoretical approach of your project

Giving a brief overview of your methods or theoretical approach is important to give your audience an understanding of how your project works. What procedures or steps did you follow to complete this project? Keep in mind that this will look drastically different depending on the field that you and your project are a part of.

In STEM projects, you'll always discuss the method(s) utilized, like this example:

To address this question, I used a specific staining of the 5-HT neurons in the living central nervous system (CNS) that allowed me to (1) systematically record their electrical activity following a noxious stimulus, and (2) trace their projections using the neuronal tracer Neurobiotin.

Depending on the field, Humanities projects can include methods OR theoretical approaches for analysis, which can look like this:

Dissatisfaction with the power structures of tradition and validation of marginality are characteristics of such vision, which inscribe Peri Rossi in the postmodern current of Latin American literature. The postmodern condition agrees with the major conclusions drawn from both works.

And in Fine Arts, this section can include a range of methods, techniques, and discussions of media utilized:

It is his [Arne Ase's] research, which I have expanded upon and integrated into my own ceramic work. Additional colorants have been tested, including iron sulphate, cobalt sulphate, and copper sulphate. A different firing atmosphere has been incorporated in the research, as well as two porcelain bodies, to expand the palette of colors that can be obtained.

3. Give an overview of the results and implications of your project

Briefly describe the major takeaways of your results and the most important implication(s) of those results. What's the most interesting outcome of the project with which you can entice your audience?

STEM projects often focus on the data and outcome of experiments or a study, and will report the results and implications:

I found that in response to tail-nerve shock, a procedure known to mimic a noxious tail stimulus, the vast majority of 5-HT neurons increased their firing rate for several minutes and became more excitable. 5-HT neurons were found to project toward various peripheral targets such as the gill, heart, body wall, tail, siphon, head, and tentacles as well as to other ganglia in the CNS. This study shows that the Aplysia 5-HT system is globally and persistently activated after a noxious stimulus. Such an activation might serve to synchronize the different aspects of the arousal reaction in Aplysia.

Humanities projects use their methods or theoretical approach(es) to analyze and provide insight into the subject of study as their results and implications:

First, tradition is viewed as a decadent state of affairs that needs to be brushed aside, for it does not respond to genuine human concerns and, in fact, has frustrated and destroyed them. Parody is the tool used to dispose of tradition. Secondly, there has to be an acceptance of the margins, of the other. This presupposes a tolerant ambiguity of inclusion that is capable of rebuilding instead of destroying, and does so by using the very materials of the other. What El Libro destroys La nave rebuilds. El Libro's mission is to do away with the atrophied waste of patriarchal order, while La nave seeks to fill up the resulting void with one possible solution: the conciliation of opposing forces by a tolerant philosophy of inclusion.

Finally, the Fine Arts can have a wide range of results and implications, from describing the outcome of the project to how it resonates with audiences:

The most successful test results have been applied to my porcelain forms, which include a wide variety of functional objects, in order to contribute to my ongoing exploration of personal expression through the medium of clay.

These are just a few examples of what abstracts can look like, but they give you a basic idea of how to begin constructing your own and adapt it for your UROP project. To view more example abstracts, [click here](#) or head to <https://urop.uci.edu/symposium/>. To view the example abstracts discussed here in full, see below. And to chat with someone about your writing, including your UROP Undergrad Research Symposium Abstract, make an appointment with the UCI Writing Center at <http://www.writingcenter.uci.edu/>!

Full Example Abstracts:

Note that these abstract examples come directly from UROP's previous Undergrad Research Symposium successful applicants. For your benefit, the abstracts have been highlighted to reflect **problems, purpose, and context in orange**, **methods or theoretical approaches in green**, and **results and implications in purple**.

Dance Abstract: "Syncope"

The definition of syncope is: a brief lapse in conscience caused by a transient cerebral hypoxia (lack of oxygen). Using the theme "brief lapse in consciousness," this piece focuses on the audience's perception and the interference in the visual reception. It explores the use of non-traditional light sources to illuminate the body and face. The illumination of the body creates a dramatic contrast of light vs. dark. The darkness becomes just as important as the light in the visual field. **Development of this piece involved learning how to control the visual field with movement and having the dancers manipulate the audience's spatial perception. I learned how this process works by rehearsing in a dark studio with flashlights. The flashlights can be used to light the whole body or specific parts of the body.** The images of floating body parts create a magically surreal mood. It is sometimes difficult for the audience to perceive what is real and what is an illusion, creating brief lapses with reality or consciousness. The music adds to the overall atmosphere of the piece because of its low and calming effect.

Humanities Abstract: "Cristina Peri Rossi: The Postmodern Transgressions of Parody and Ambiguity"

Uruguayan writer Cristina Peri Rossi's first book, *El libro de mis primos* (The Book of My Cousins, 1969), is compared with her later novel, *La nave de los locos* (The Ship of Fools, 1984), to suggest how an authoritarian society can be criticized through parody and then rebuilt on the foundations of a philosophy of ambiguity, similar to Lyotard's vision of the postmodern. **Dissatisfaction with the power structures of tradition and validation of marginality are characteristics of such vision, which inscribe Peri Rossi in the postmodern current of Latin American literature. The postmodern condition agrees with the major conclusions drawn from both works.** First, tradition is viewed as a decadent state of affairs that needs to be brushed aside, for it does not respond to genuine human concerns and, in fact, has frustrated and destroyed them. Parody is the tool used to dispose of tradition. Secondly, there has to be an acceptance of the margins, of the other. This presupposes a tolerant ambiguity of inclusion that is capable of rebuilding instead of destroying, and does so by using the very materials of the other. What *El Libro* destroys *La nave* rebuilds. *El Libro*'s mission is to do away with the atrophied waste of patriarchal order, while *La nave* seeks to fill up the resulting void with one possible solution: the conciliation of opposing forces by a tolerant philosophy of inclusion.

Science Abstract: “Persistent Global Activation of the Aplysia Serotonergic System after Sensitizing Stimuli”

The marine mollusk *Aplysia* responds to noxious stimulation with a stereotyped arousal reaction that includes escape locomotion, increased heart rate and sensitization of defensive reflexes. Although previous studies have shown that serotonin (5-HT) is important for most of these behavioral responses, it is still unclear how the 5-HT system is activated in response to noxious stimuli. To address this question, I used a specific staining of the 5-HT neurons in the living central nervous system (CNS) that allowed me to (1) systematically record their electrical activity following a noxious stimulus, and (2) trace their projections using the neuronal tracer Neurobiotin. I found that in response to tail-nerve shock, a procedure known to mimic a noxious tail stimulus, the vast majority of 5-HT neurons increased their firing rate for several minutes and became more excitable. 5-HT neurons were found to project toward various peripheral targets such as the gill, heart, body wall, tail, siphon, head, and tentacles as well as to other ganglia in the CNS. This study shows that the *Aplysia* 5-HT system is globally and persistently activated after a noxious stimulus. Such an activation might serve to synchronize the different aspects of the arousal reaction in *Aplysia*.

Social Sciences Abstract: “Stereotype Threat”

The stereotype threat theory (Steele 1992, 1997) examines the underperformance of women in mathematical domains and minorities in academic domains and attempts to explain these trends as being due to situational anxiety. Research indicates that the performance differential between genders and ethnicities can be best understood in terms of stereotype threat activation rather than biological determinants. The anxiety a stereotyped individual feels when confronted with an academic task is compounded by a societal expectation of failure. However, not much research currently exists on the mediating effects of personal belief in the stereotype. The goal of this study was to examine whether anxiety was correlated with a stronger belief in the stereotype among college-aged participants. Individuals from stigmatized groups demonstrated a significantly greater likelihood to experience higher anxiety levels if they believed the negative stereotype and that higher anxiety level correlated with lower test scores. These results provide general support for Steele’s stereotype threat hypothesis.

Studio Art Abstract: Water Soluble Colorants on Porcelain

In the ceramic work of Scandinavian artist Arne Ase, water-soluble materials such as titanium sulphate, cobalt chloride, tungsten oxide, molybdenum chloride, and selenium chloride are utilized as decorative elements on his porcelain forms. Such chemicals are not of common use in the ceramic arts because of the expense of the raw materials and the possible hazards of working with these chemicals. However, these colorants can create subtle yet breathtaking effects, including hues of black, blue, yellow, or pink, that blend with the surface of the clay, as if the porcelain vessel were a watercolor painting. It is his research, which I have expanded upon and integrated into my own ceramic work. Additional colorants have been tested, including iron sulphate, cobalt sulphate, and copper sulphate. A different firing atmosphere has been incorporated in the research, as well as two porcelain bodies, to expand the palette of colors that can be obtained. The most successful test results have been applied to my porcelain forms, which include a wide variety of functional objects, in order to contribute to my ongoing exploration of personal expression through the medium of clay.