

UNDERGRADUATE RESEARCH SCHOLAR PROGRAM

ABSTRACT GUIDELINES

Use these tips to help prepare your abstract for submission.

Students must submit abstracts of their faculty-mentored research, scholarly, or creative activity.

Reminder: For group projects, only one abstract and one submission are required.

Abstract Content

What Is an Abstract?

- An abstract is a single, well-developed paragraph, and should be exact in wording.
- It is a summary of your presentation and your entire project.
- It should have an introduction, body and conclusion.
- It highlights major points of the content and explains why your work is important, what your purpose was, how you went about the project, what you learned, and what you concluded.
- It must be understandable to an interdisciplinary audience.
- It does not include any charts, tables, figures, citations, or other supporting information.

Abstract Format

Many abstracts follow a format similar to this:

1. The problem to be investigated.
One to two sentences that state why the project was undertaken.
2. The purpose of the study.
One to two sentences that outline the nature of the project and how it differs from other, similar projects.
3. The methods.
One to two sentences that summarize the important methods used to perform the project.
4. The major results.
One to two sentences that summarize the major results—not necessarily all the results—of the project.
5. The interpretation.
One to two sentences that summarize your interpretation of the results.
6. The implications.
One sentence that summarizes the meaning of your interpretation—what is important about these results.

Abstract Format

Abstracts should be:

- In Microsoft Word.
- In 12-point Times New Roman font.
- No more than 250 words in length.
- Single-spaced and a single paragraph.

Include the following in the abstract heading:

- Title of the paper. If your title includes Greek letters, scientific notation, bold, italics, or other special symbols or formatting, make sure they are formatted correctly when you submit the abstract.
- Full name of the student author(s). Please include any additional undergraduate co-authors, whether they are presenting with you or not.
- Name(s) of the faculty mentor(s).

Sample Abstracts

Sample of the Format

Title of the Paper

Joe U. Student

Mentor: Mary J. Professor

Abstracts must include sufficient information for reviewers to judge the nature and significance of the topic, the adequacy of the investigative strategy, the nature of the results, and the conclusions. The abstract should summarize the substantive results of the work and not merely list topics to be discussed. An abstract is an outline/brief summary of your presentation and your entire project. It is a single well-developed paragraph, should be exact in wording, and must be understandable to a wide audience. An abstract should be a no more than 250 words, saved in a Microsoft Word file, and single-spaced, using 12-point Times New Roman font. Abstracts highlight major points of the content and answer why your work is important, what your purpose was, how you went about your project, what you learned, and what you concluded.

Dance Abstract

Syncope

Jenny A. DeMuth

Mentor: Dr. Marc Kotz

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

Eduardo Ruiz

Mentor: Dr. Lucia Guerra-Cunningham

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

Kristine Kolkman

Mentor: Dr. Thomas Carew

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

Stephanie Domzalski

Mentor: Dr. Geoffrey Iverson

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

Jennifer L. Brant

Mentor: Dr. Charles Olson

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.