Undergraduate Summer Scholar Program 2012

Corey McClure:

Faculty Mentor: Javier Carmona, Art

Corey, a photography student, is using his award to travel around the Mid-Western U.S. in order to visit five National Parks or Forests, which he will document through photography and journalism. Corey will draw on his experience and knowledge as a photography student to develop his skills in natural/landscape photography. The images and journals will serve the purpose of attempting to answer questions about nature, such as what is nature, how does it influence our lives, how is it separate from technological society, and why have we chosen to preserve it in nationally protected parks? Corey will analyze the work of Howard Kunstler, Peter Henry Emerson and Fox Talbot as resources for his work. Corey's faculty mentor is Javier Carmona, who will collaborate on Corey's work by critiquing photographs.

Emmajane Thompson:

Faculty Mentor: Tracy Caldwell, Psychology

Emmajane's research will investigate a specific teaching method, rival to that of the current teaching paradigm, that has been shown to positively influence student performance. The teaching model is called defensive pessimism, and is characterized as a strategy used by individuals to avoid failure. When introduced to a stressful situation, individuals can respond by adopting one of two strategies: achieve success or avoid failure. Defensive pessimism adopts the latter strategy, and is useful in that the individual sets their expectations so low, that they convince themselves they will fail, and as a result become highly motivated to avoid that failure. Working with Tracy Caldwell, Psychology, as her mentor, Emmajane will eventually present her work at the URSCI Expo in April of 2013, and will also submit her work for publication in a research journal.

Undergraduate Summer Scholar Program 2011

Joshua Johnson:

Faculty Mentors: Elena Peteva, Art & Jeffery Cote de Luna, Art

Joshua, an art major, used his award to create a series of portraits that were influenced by, and responded to the work of major figurative painters. Joshua felt that creating these portraits would improve his painting, and that through the process of observing the sitter developing and resolving these paintings, he would further his knowledge of the anatomy of the head, the colors present in skin and the use of paint quality and brush stroke to create form. His faculty mentors, Elena Peteva and Jeffery Cote de Luna, guided him in these painting problems through critiquing the works as they

progressed. In addition to the knowledge of his professors, Joshua looked to contemporary figure painting masters such as Lucian Freud, Euan Uglow and Odd Nerdrum for inspiration.

John Pontikis:

Faculty Mentor: Daniela Andrei, Chemistry

John, a chemistry major, continued his study of diazeniumdiolates, which are compounds that have the potential to be used as drugs in treating heart disease or other ailments. He continued to expand the library of diazeniumdiolates that he had synthesized under his mentor's (Dr. Daniela Andrei) current research project by using different primary amines as the starting material for the reaction to create the initial products. In addition, John analyzed the compounds he had already synthesized to determine their potential effectiveness as a drug. John was able to gain more hands-on experience in the field of organic synthesis, and learned about the process of drug discovery. He gathered sufficient data to publish a paper and attend conferences, including the national meeting of the American Chemical Society in August of 2011.

Kaydene DeSilva: Received the Jared-Beach Undergraduate Summer Scholar in Psychology/Neuroscience award for 2011

Faculty Mentor: Tina Taylor-Ritzler, Psychology

Kaydene, a Psychology major, endeavored to better understand the inter-racial relationships among college students. Kaydene found that although there had been extensive research on inter-racial marriages, there was little research on its precursor, inter-racial dating. Research had mainly focused on people's perceptions of inter-racial relationships (what they think about it, if they would consider having one, etc.). Under the mentorship of Psychology Professor Tina Taylor-Ritzler, Kaydene examined the factors that lead college students to be involved in inter-racial dating relationships, and the experiences that they have by being a part of that relationship. The goal of the proposed study was to achieve a deeper understanding of inter-racial relationships as an important aspect of appreciating the diversity of the United States. Kaydene presented her findings at the Midwestern Psychological Association (MPA) annual conference in May, 2012.

Undergraduate Summer Scholar Program 2010

<u>Alison Wesolowski:</u> Received the Jared-Beach Undergraduate Summer Scholar in Psychology/Neuroscience award for 2010

Variables That Predict a Latino/a Student's Intent to Pursue a Graduate Degree

Faculty Mentor: Rebecca Pliske, Psychology

The purpose of Ali's research was to examine variables that predicted the intent of a Latino/a student to go to graduate school. Her research was comprised of two parts. For the first part, she investigated variables that were thought to determine intent to pursue a graduate degree, such as cultural identity, locus of control and social support. Once this information was obtained, she then moved on to the next

part of her research, which was investigating how these variables influenced one's evaluation of major life decisions. By identifying characteristics of those students who intended on pursuing a graduate education, she was able to work towards instilling these characteristics in young students which could eventually lead to more Latino/a degree holders.

Rose Beausoleil:

The effects of men's self-esteem on perceptions of role-incongruent women

Faculty Mentor: Tracy Caldwell, Psychology

Researchers are often interested in the features of a woman that make them more or less attractive to men. The purpose of this project was to explain differences in women's attractiveness as a function of aspects of the perceiver and of the target. One aspect of the target that could influence whether she was perceived as attractive concerns how closely she adhered to the prescibed gender role. This research was interested in studying men's perceptions of women who did not act in their gender role. A large aspect of the study was to examine the predictors of men who found gender incongruent woman as favorable, if not more favorable, than women who adhered closely to traditional gender roles. The expected outcomes of this project were that men who were low in self-esteem would find non-traditional women less attractive than traditional women, and that this attraction would further depend on the context in which men perceive non-traditional and traditional women (friendship, short-term relationship, or long-term relationship.

Angelica Diaz:

Yo Soy: Documenting an Oral History

Faculty Mentor: Mary Scott Simpson, English

For this project, Angelica explored and documented her family's oral history. The goal was to create a documentary film in which she could reveal her family's journey to America in the 20th century. It explored why they left their homes and came to a strange land, as well as how this move worked for and against them. It also explored the idea of cultural identity and the effects that such a journey can have on personal identity. In preparation for this project, Angelica researched the Federal Writers' Project and its impact as well as other sources that were located that documented Hispanic culture in America during the 1930s. She also researched photographers, especially Hispanic photographers, who use photography to explore into cultural identity. Having laid a groundwork through this research, she began the interview and filming process. She interviewed her relatives and asked them to share their stories. She asked them to provide details about when, how, and why they came to America. She also asked about their lives before and after their journey, and the impact their journeys had on their lives, and the lives of their children.

Undergraduate Summer Scholar Program 2009

<u>Sandra Alvarez:</u> Received the Jared-Beach Undergraduate Summer Scholar in Psychology/Neuroscience award for 2009

The Effect of Implicit Theories on the Endorsement of Gender Stereotypes

Faculty Mentor: Tracy Caldwell, Psychology

Everyone has a system of beliefs of which they are unaware, that may affect their perception of others. Two of these belief systems or implicit theories of interest are entity and incremental theory. Entity theorists tend to view personality as fixed while those with an incremental mentality believe that it can be changed over time. Though people tend to lean toward one implicit theory over another, they do hold beliefs related to both. This is lucky for experimentation, because it allows one to manipulate the salience of either implicit theory to see its effects on judgments. To examine the effects of the theories, the salience of implicit beliefs was manipulated by asking individuals to read articles that varied on topic (personality changes over time, personality is fixed, or the trend of teenagers hugging). Prior to this manipulation, ambivalent sexism was measured. After the manipulation, it was measured again to see if it would change as a function of what implicit theories had been made more salient. Then participants read a short vignette about a work environment situation for which they later answered questions designed to get at their stereotypical thinking. Results based on data analysis were discussed.

Jessica Myers:

Examining Existence: The Portrait of a Home

Faculty Mentor: Noelle Wright, Sculpture

With the assistance of the 2009 Undergraduate Summer Scholar Program, Jessica embarked on a journey that took her across the four corners of the United States. Using her camera, she examined the relationships between people and their living spaces. Whether house or home, apartment or studio, she documented images of spaces, photographing evidence of personality and lifestyle in tangible, physical ways. By examining these homes, she was able to give the viewer a glimpse into the behaviors, hardships, and success stories of a person. This portrait of a space examined the parallel existence of the person and the place in which they live. These photographs would become a non-traditional portrait, revealing quirks, traits, secrets, and facts about their homeowner.

Brigitte Bell:

John Ruskin in the 20th Century: An Examination of the Aesthetic, Moral, and Social Dimensions of Public Art Controversies Faculty Mentors: Ellen McManus & Joe Heininger, English

This project was an exploration of the work of Victorian art and social critic John Ruskin. In her paper, Brigette argued that Ruskin, though he seemed to embody the Victorian values that had been rejected by critics in the 20th century, was really a dynamic thinker who helped define the shift from 19th to 20th century values. The 1878 Whistler v. Ruskin trial helped to create the stereotype of him as simply a moralist thinker, but a closer examination of the issues surrounding this trial revealed the dynamic nature of his thinking, which synthesized aesthetic, social and moral dimensions. An examination of a more recent art controversy, the 1985 debate over Richard Serra's Tilted Arc sculpture, revealed that the complexity of his ideas could help us better understand the multifaceted nature of art in the 20th century, suggesting that his ideas still influenced the public's thinking about the nature and role of art.

Undergraduate Summer Scholar Program 2008

Marcin Wrobel:

Faculty Mentor: David Perry, History

This project explored the legal origins of the Spanish Inquisition. Marcin's fellowship gave him the opportunity to use primary sources at the University of Notre Dame's rare book collection. Undergraduate history research projects are often limited to secondary source materials, so this fellowship allowed Marcin to complete a graduate level research project as an undergraduate, which increased his chances of getting into a competitive graduate program in history.

Mary Petrosko:

Faculty Mentor: Robert Calin-Jageman, Psychology

This project studied the effects of *Ginkgo biloba* on learning and memory using the marine gastropod *Aplysia californica* (a sea slug). Mary's fellowship allowed her to extend her honors project that focused on the behavioral effects of *Ginkgo biloba* to include physiological measures. For her summer fellowship, Mary conducted physiological experiments to gain a better understanding of the neural activity related to learning and memory. Mary's completion of such a comprehensive set of experiments enhanced her opportunities for getting into a competitive graduate program in neuroscience.