

Humanities Abstracts

“Margaret C. Anderson’s Little Review”

Sophia Estante and Lorrie Moore (Mentor), English

This research looks at the work of Margaret C. Anderson, the editor of the Little Review. The review published first works by Sherwood Anderson, James Joyce, Wyndham Lewis, and Ezra Pound. This research draws upon mostly primary sources including memoirs, published letters, and a complete collection of the Little Review. Most prior research on Anderson focuses on her connection to the famous writers and personalities that she published and associated with. This focus undermines her role as the dominant creative force behind one of the most influential little magazines published in the 20th Century. This case example shows how little magazine publishing is arguably a literary art.

"The Commemoration and Memorialization of the American Revolution"

Benjamin Herman and Jean Lee (Mentor), History

This project involves discovering how the American Revolution was remembered during the nineteenth century. The goal is to show that the American Revolution was memorialized by the actions of the United States government during the 1800s. This has been done by examining events such as the Supreme Court cases of John Marshall and the Nullification Crisis. Upon examination of these events, it becomes clear that John Marshall and John Calhoun (creator of the Doctrine of Nullification) attempted to use the American Revolution to bolster their claims by citing speeches from Founding Fathers. Through showing that the American Revolution lives on in memory, this research highlights the importance of the revolution in shaping the actions of the United States government.

Social Science Abstracts

“Subtype of Autism: Developmental Verbal Dyspraxia”

Amanda Babin and Morton Gernbascher (Mentor), Psychology

The purpose of this research is to identify a subtype of autism called Developmental Verbal Dyspraxia (DVD). DVD is a motor-speech problem, disabling oral-motor movements needed for speaking. The first phase of the project involves a screening interview where we identify DVD and Non-DVD kids. We also use home videos to validate answers on the screening interview. The final phase involves home visits where we use several assessments to confirm the child’s diagnosis and examine the connection between manual and oral motor challenges. By identifying DVD as a subtype of Autism, we will eliminate the assumption that all Autistics have the same characteristics. This will allow for more individual consideration of Autistic people and may direct future research on the genetic factors in autism.

“The Tony Hawk Learning Project”

Lauren Silberman and Elisabeth (Betty) Hayes (Mentor), Curriculum & Instruction

The study is to show how even a “sport” video game can incorporate many types of learning, to call attention to what might be overlooked as significant forms of learning, and to understand and take advantage of the opportunities video games afford as more deliberate learning environments. The aspects explored are the skills and techniques required to be successful in the game, the environment that skaters skate in, the personal vs. group identity that is shown through the general appearance of the skater, and the values and icons that the game teaches players. We are finding that sport video games support learning; we hope to find how one learns about oneself as a learner from playing.

Hard Science Abstracts

“Biogeography of Chemical Defense in Birch Trees”

Sarah Brown and Michael Stevens (Mentor), Botany

The Latitudinal Defense Hypothesis predicts that levels of defense are highest near the equator and decrease toward the poles. This hypothesis is based mainly on insect herbivory that occurs during the summer. Mammalian herbivory in the winter is a more likely driver of plant defense levels in northern latitudes. Early successional trees such as birches are favored by fire and provide an important food source for mammals like snowshoe hares. In order to test the Latitudinal Defense Hypothesis, we collected birch seeds from eight locations in northwestern Canada and grew seedlings in a common garden. We assessed levels of defense by counting resin glands because resin glands are negatively correlated with snowshoe hare preference. This research will provide valuable information regarding the biogeography of defense and address the role of fire in plant-mammal interactions on a continental scale.

“Understanding Cell-Mediated Immune Responses Against Simian Immunodeficiency Virus (SIV)”

Sean Spenser and John Loffredo, David Watkins (Mentors), Primate Research Center

Each day 14,000 people become infected with HIV/AIDS, making the development of an effective vaccine one of the world’s top public health priorities. David Watkins’ laboratory is attempting to develop HIV vaccines that elicit cellular immune responses utilizing the simian immunodeficiency virus (SIV) – infected rhesus macaque animal model. A major component of the cell-mediated immune response are cytotoxic T-lymphocytes (CTL). It is thought that CTL play an important role in controlling HIV and SIV. Most standard immunological assays do not measure antiviral activity directly, limiting our understanding of CTL effectiveness. To address this, the Watkins laboratory developed a novel neutralization assay that quantifies the ability of virus-specific CTL populations to control viral growth. Evaluating the antiviral activity of CTL of different specificities will identify those CTL most effective against SIV. This information will likely impact the design of future HIV vaccines.

“The Genetics of Bone Strength in Mice”

Jonathan Vu and Robert Blank (Mentor), Endocrinology

The purpose of this study is to identify relationships between the physical and genetic characteristics of bones in mice. The physical characteristics include size, density, and the force required to break the bone, while the genetic ones are the genes of the marker loci associated with the genes that affect these qualities. This study uses strains of mice with reduced genetic variation. The two strains of mice that are the most phenotypically extreme, meaning those with the strongest and weakest bones, are crossed. The F2 generation from that cross is then analyzed. The results of this analysis can be used to find which genotypes correlate with specific bone properties like size, density, and failure load. The anticipated outcome of this lab is the identification of the genotypes that affect bone strength in mice. The findings may be useful in treating medical conditions that are related to bone strength.

Service Project Abstracts

“Southeast Asian Political Action Committee: Democracy at Work!”

Lauren Breshahan and Marlys Macken (Mentor), Linguistics

Upon receiving the Wisconsin Idea Undergraduate Fellowship the summer and fall 2003 semesters were spent designing and implementing a Hmong Political Council, Inc. (HPC). The fellowship addressed the immediate need felt by our local government and the Hmong refugee community to develop a political voice expressing the economic, political, and social needs of the Hmong refugee community. It was implemented through the collaboration of the United Refugee Services of Wisconsin, Professor Macken, the Hmong community, and myself. Extensive research was conducted at the local, state, and national level involving the studying of IRS requirements, lobbying rights, other political councils, and the needs of the Wisconsin Hmong community. HPC is now a legal non-profit organization that has held two fundraisers, released press statements, and worked with State and National political figures to address the needs of the Hmong community. Within the year HPC plans to be lobbying at the state level.

“Fostering H.O.P.E.: Helping Overcome Poverty through Education for Teen Moms”

Angela Cunningham and Sherrill Sellers (Mentor), Social Work

This program was designed to address the prevalent issues of teen parenthood and poverty. The idea was to introduce and reinforce the importance of obtaining a post secondary education to teen mothers in their junior or senior year of high school. The program ran for eight weeks during the summer of 2003. Participants met once a week to participate in group building activities, get insights to what it will take to finish school, and receive information on services that are available to help them along the way. The young women also had the opportunity to tour the UW and MATC campuses. The participants walked away from the program with a sense of hope that they are able to pursue their dreams despite their difficult situations.

Visual and Performing Arts Abstracts

“Blind Construction: Mixed Media”

Diana Dewi, Jennifer Kittleson, and Wendy Hagedorn (Mentor), Apparel and Textile Design

The basis of this project was to create a garment using mixed media in order to mimic the human body. The materials we used to create this piece include: buckram, copper wire, spray paint, fabric paint, a variety of novelty fabrics, and chains. The techniques we created in order to manipulate the piece include: fabric branding and burning, grid painting, sewing, draping, molding buckram, and coiling. Our overall approach was to create a theatrical wearable art piece. Upon completion of the assignment we found the piece aesthetically pleasing because of the way it molds to the human body, but can be a piece all on its own.