

# STUDENT RESEARCH AND CREATIVITY INSTITUTE AWARDEES

<u>Project Title</u>	<u>Project Description</u>
<u>"Population Genetics - Mussels"</u>	Study the genetics of freshwater mussels in the Great Lakes and expand upon previous research of SVSU biology students and faculty.
<u>"Wind Ensemble - Clarinet"</u>	Travel to New York City to perform with the 2006 National Wind Ensemble.
<u>"Saginaw Community Mural Project"</u>	Creation of four historical community murals in Saginaw.
<u>"Wind Ensemble - French Horn"</u>	Travel to New York City to perform with the 2006 National Wind Ensemble.
<u>"Wheelchair Pressure Sensor"</u>	To develop a prototype wheelchair pressure sensor.
<u>"Computation Cerium Compound"</u>	Research Cerium compounds in catalytic converters; travel to the 231st National Meeting and Exposition of the American Chemical Society
<u>"Lessons of Naval Power"</u>	Travel to London for archival research of the Napoleonic-era British Royal Navy and a comparative analysis with the modern U.S. Navy.
<u>"Develop Autonomous Vehicle"</u>	Lead a group of SVSU SMEA students in a beautification and literacy project at Merrill Park Elementary in Saginaw
<u>"International Medical Systems/Ghana"</u>	Travel to Ghana to fight the spread of HIV/AIDS
<u>"Framework for Executing VHDL Code on FPGA"</u>	Computer programming project that would allow computers to run complex algorithms associated with image compression more easily
<u>"Millett Learning Center Wheelchair Wheel Cleaning Device"</u>	Design and build a wheelchair wheel-cleaning device for the Millett Learning Center
<u>"Yellow Ribbon Campaign"</u>	Travel to Australia to study the "Yellow Ribbon Campaign," a suicide prevention program, and implement it at SVSU
<u>"Physical Activity, Pedometer Programs and Fitness for Elementary and Middle School Children"</u>	Implement a classroom-based physical activity program at Saginaw's Arthur Eddy Academy

<u>"Literary Criticism: Elementary Style"</u>	Develop techniques to introduce literary criticism at the elementary level
<u>"Current Relations between the Irish and English Cultures"</u>	Travel to the British Museum Library to study original documents and further research Irish-English relations
<u>"Investigation of Injury Patterns among Decedents in Aircraft Crashes"</u>	Study reports and compile a database in a readily accessible format for researchers to answer questions regarding causes, circumstances, or effects of fatal private aircraft crashes in the U.S.
<u>"San Francisco Conference"</u>	Travel to a joint conference of the American Culture and Popular Culture associations to present analysis of gender roles in the film Shaun of the Dead
<u>"Role of Coping Strategies on Stress and Academic Engagement"</u>	Travel to the Midwestern Psychology Association conference to present research on the role of coping strategies on stress and academic engagement
<u>"Develop Autonomous Vehicle"</u>	Lead a team of students in developing an autonomous vehicle for competition at the Intelligent Ground Vehicle Competition at Oakland University
<u>"To Make Artificial Intelligence Methods into Distributed Jobs"</u>	Research artificial intelligence and distributed computing using the processing power of multiple computers to work on complex tasks
<u>"S<sup>2</sup>AMIC - Self-Playing Guitar"</u>	Create a prototype of a self-playing acoustic guitar using mechanical and electrical circuitry to manipulate guitar while writing computer programs to tell guitar what to play
<u>"CD72 Gene"</u>	To purchase disposable lab equipment, enzymes and other materials to determine whether the CD72 gene is associated with cancer.
<u>"E-Braille"</u>	To develop an electronic tag and reader system to help visually impaired student find SVSU buildings and classrooms.
<u>"Robert Gould Shaw and Abolition"</u>	To support primary source research in Boston and New York City on attitudes towards abolition by Colonel Shaw and to produce a scholarly paper for publication
<u>"Effect of Femininity on Juror Apportionment of Blame in Sexual Assault Cases"</u>	To purchase human response dials, conduct a case study of jury attitudes towards rape victims, and to present findings at a conference.
<u>"Alternative Energy Charging Station"</u>	To create a hybrid alternative energy system (solar and wind) to charge an electric cart vehicle.
<u>"Shattering the Glass Ceiling for Women in Ghana"</u>	To train Ghanian marketplace women in basic managerial skills and to establish a model entrepreneurial program.
<u>"Deathtrap"</u>	A collaborative act: bringing the thrills and entertainment of murder mystery theatre to the Saginaw Community.

<p><u>"Investigation into the Effects and Implications of the Increase in the Michigan Minimum Wage on the Tri-County Businesses"</u></p>	<p>A research project to investigate the effects and implications of the increase in the Michigan minimum wage on the Tri-County businesses.</p>
<p><u>"Aquaponics Automated Monitoring System"</u></p>	<p>The purpose of this project is to design a system for SVSU which will automate the process of collecting critical data used in maintaining and monitoring of an Aquaponics system.</p>
<p><u>"Population Genetics of Great Lakes Region Invasive Mussels"</u></p>	<p>To examine and analyze the population genetics of mussels in the Great Lakes.</p>
<p><u>"Molecular Ecology and Population Genetics of Michigan Waterfowl"</u></p>	<p>To analyze the population genetics of Mid-Michigan waterfowl populations using microsatellite DNA markers.</p>
<p><u>"Outdoor Wheelchair-Accessible Merry-Go-Round"</u></p>	<p>To create an engineering project, utilizing mechanical engineering knowledge, to create an outdoor wheelchair-accessible merry-go-round.</p>
<p><u>"Molecular Genetic and Behavioral Analysis of the Effects of Endocrine Disrupting Compounds on Sperm Competition in Hybrid Rats"</u></p>	<p>To examine the effects of a known endocrine disrupting chemical on sperm competition in rats.</p>
<p><u>"Tlatelolco, Mexico Student Massacre of 1968"</u></p>	<p>To investigate primary historical documents in order to examine the role that Mexican women played in the Tlatelolco, Mexico, student massacre of 1968 and its aftermath.</p>
<p><u>"Develop a Power-Generating Bicycle"</u></p>	<p>To develop a bicycle capable of powering small electronic devices.</p>
<p><u>"The Effect of a Wellness Program on Injury Prevention, Physical Activity Levels, Cardiovascular Risks, Physical Fitness in Firefighters"</u></p>	<p>To evaluate changes in physical activity, fitness, cardiovascular disease risk, and injury in firefighters participating in a wellness program.</p>
<p><u>"The Effects of the Neuromodulator Serotonin on Muscle Activity"</u></p>	<p>To examine how muscle activity and strength are modified by serotonin within crayfish.</p>