

6th Annual Academic Festival



April 13, 2011

Penn State Mont Alto

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<p>Cover artwork by Stephanie Eickstedt</p>
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IDENTIFYING SUITABLE PLANTING SITES FOR COAST REDWOOD ON THE WAYNESBORO WATERSHED USING GIS

Mitch Oswald

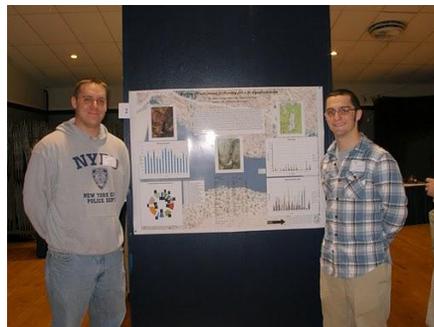


My project mapped the native range of coast redwoods. As well as learning and mapping the soils, aspect, elevation, and climate of these trees in order to see if they will grow when we receive 100 seedlings from California. I compare the native range of these trees with the soils, elevation, aspect, and climate of the Waynesboro Watershed. This is presented with a map with different layers showing the soils and the other layers I described above. This data will help determine which areas will be best to plant the trees on the Watershed.

Faculty Mentors: Beth Brantley, Craig Houghton, & Peter Linehan.

ESTABLISHING GIS-BASED PERMANENT FOREST INVENTORY PLOTS ON THE WAYNESBORO WATERSHED

Scott Grimm & Derek Furry

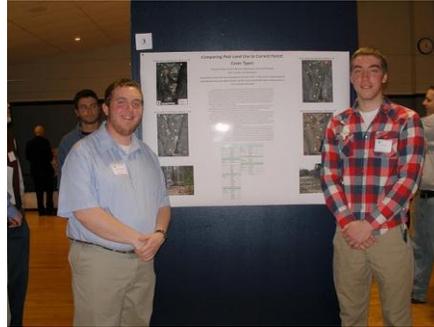


We evaluated the Waynesboro Watershed using GIS analysis to stratify permanent plot locations according to selected criteria. Once the locations were determined, we worked together to establish permanent plots and collect forest inventory data. The data are summarized, along with a map of our plots. This project will serve as baseline information for the watershed. The data collected will be useful to the Borough of Waynesboro for long-term planning.

Faculty Mentor: Craig Houghton

COMPARING PAST LAND USE TO CURRENT FOREST COVER TYPES

Zachary Hetrick & Seth Morris



We compare the past land use of the Waynesboro watershed as farm fields to the current forest cover types that have grown in their place

Faculty Mentor: Peter Linehan

HOPE FOR THE EASTERN HEMLOCK?

Tyler Wakefield



This experiment was performed to test the effectiveness of different treatments at controlling elongate hemlock scale and hemlock wooly adelgid. Five different treatments were used on five different groups of trees. Each group was comprised of 10 hemlock trees. There were five treatment groups and one control group, so there was a total of 60 hemlock trees involved. The hemlocks chosen for this experiment had to be between 8"-14" in DBH, have 10 live branches within arms' reach, and be at least 200 feet away from other treated trees. The trees are all located in Caledonia State Park. The number of elongate hemlock scale and hemlock wooly adelgid was counted on each tree before treatment was applied, and will be counted again in the spring to see how effective each treatment was.

Faculty Mentors: Peter Linehan & Beth Brantley

INCREASING CULTURAL AWARENESS/SENSITIVITY OF THE LGBT AMONG HEALTHCARE

Jennifer Hutsler



The aim of this study is to increase cultural awareness and sensitivity when providing care to the lesbian, gay, bisexual and transgender (LGBT) population. Research for this project included exploring the healthcare needs and trends among the LGBT community and educating health care professionals on how we can become advocates through positive affirmation and how we can institute ways to transform social norms and institutional systems toward inclusion. Discrimination of race, religion and gender identity/sexual orientation is not optional; we owe it to our patients to be culturally competent when assessing our patient's health care needs.

Faculty Mentor: Stephanie Unger

EFFECTS AND IMPORTANCE OF HAPTICS

Anthon Williams, Chris Wiehagen, Cameron Dayley, Brian Steiner & Kyle Trayer



This project compares varieties of input and their effect of speed, accuracy and user reaction. In particular we will be testing the change from entering text using a touch screen without vibration feedback to using the device with vibration feedback enabled.

Faculty mentor: Lila Rajabion

IMPACT OF ERP IN SCM FOR LARGE BUSINESS

Chris Wiehagen, Brandon Deardorff & Adam Lynch



The main goal of this research paper is to see how ERP when used with SCM benefits large businesses. Other goals of the research paper are to find what opportunities ERP offers SCM, analyze any possible issues implementing ERP with SCM, and good aspects of implementing ERP with SCM.

Faculty mentor: Lila Rajabion

CLOUD COMPUTING WITH ERP

Cameron Dayley, Kyle Trayer & Brian Steiner

No Picture available

This project analyzed how ERP solutions have risen to be a front runner in the cloud computing world. Also, we explain how ERP can be implemented into cloud computing for small to medium sized companies as well as the advantages and disadvantages of using an ERP system. We discuss some current companies that are using an ERP system with their cloud computing system as well as what their opinions are on their investment. We analyzed some of the vendors that provide ERP solutions and the costs for these solutions. We examined the barriers that companies trying to implement an ERP system face.

Faculty mentor: Lila Rajabion

EXHIBITS

BULLYING DURING ADOLESCENCE

John Arey, Tuesday Joy, Jennifer Sandusky, Carly Gomer & Mariah English



We analyzed bullying during adolescence. Our group identified what a bully is and the behavior associated with that role, as well as the main types of bullying apparent in adolescents today. We studied the Olweus Bullying Prevention Program, which is being adopted in local school systems to help identify the roles involved in bullying behavior and how they can move to a new role in it. We also examined statistics related to bullying and responses to an in-class survey to which students responded to several questions about bullying in their lives. We discuss warning signs to identify those being bullied and the consequences of what school systems, and social networking sites, such as Facebook, are doing in response to bullying behavior. We suggest what adolescents can do about bullying, either preventing it from happening or if they are currently being bullied.

Faculty mentor: Robin Yaure

RECYCLING

Jennie Diehl



I am currently making recycling posters for Mont Alto campus to encourage students and faculty to recycle. The posters that I am creating will be similar to the "read" posters on campus. I am photographing students and faculty recycling in numerous ways for the posters. Each poster will have its own slogan, with the central idea of recycling. I want to do whatever I can to encourage Penn State to recycle. The posters for each residence hall will be displayed. My exhibit explains why we did the posters and what we hope to accomplish.

Faculty mentor: James Hamilton

THE SOURCE FARM ECOVILLAGE

Jennie Diehl



During Spring break, I was in Johns Town, Jamaica staying at The Source Farm EcoVillage. There, I learned about organic farming, holistic health, sustainability, and much more that The Source Farm is dedicated to. My exhibit displays pictures of my trip. The goal of this project is to encourage people to reduce their carbon footprint on their travels and to educate them of green design and interaction with the local community. I stayed in an EcoCabin which uses wind power, recycled rainwater, and solar panels. I photographed evidence of sustainability, interviewed owners and employees of The Source Farm, and maintained a journal. My hopes are to attract those who are interested in going green, which should target a variety of students and faculty. If you would like to learn more about The Source Farm you can check out their website at <http://www.thesourcefarm.com/home>.

Faculty mentor: Beth Brantley

LOW TEMPERATURE-DIFFERENTIAL STIRLING ENGINE

Alan Strayer & Jason Nitz



Stirling engines are thermodynamic engines which convert heat into mechanical energy. For these engines heat is supplied externally either by burning fuel of any kind (including wood) or utilizing sun light or temperature differences existing naturally (day vs. night, temperature differences in ocean water). This project consists of building a small Stirling engine capable of running off the heat of a cup of coffee as a demonstration project and showing the influence of some of the parameters.

Faculty mentor: Zig Herzog

EFFECTIVE TRANSITION FROM SKILLED NURSING FACILITY TO EMERGENCY ROOM

Kimberly Conrad



The issue perceived from staff nurse that the safe and timely transition to an emergent care facility has been delayed as a result of Emergency Protocols. This project surveyed staff nurses at a skilled nursing facility relating to communication with the Emergency Response System including the 911 call center, the emergency response team and the Emergent Care Center receiving the resident to assist with providing the safest and timely transition of the resident to the Emergent Care Facility. This exhibit illustrates the research goal, method and the results of the survey, the tools and method.

Faculty mentor: Stephanie Unger

EATING THE RIGHT WAY, THE RIGHT SIZE, THE RIGHT TIMES

Kimberly Conrad



This exhibit examines the impact of obesity and shows how to choose the correct portions sizing to assure you are eating the right foods and the correct amounts of the daily recommendations to avoid long-term chronic disease process. It provides examples of portion sizing with available choices to encourage label reading and choosing foods that are within the daily recommendations.

Faculty mentor: Stephanie Unger

ST-SEGMENT ELEVATION MYOCARDIAL INFARCTION (STEMI)

Jared Fisher



The project's goal was to develop and provide education materials to educate the public and health care providers towards awareness of Acute Coronary Syndrome, risks factors that affect ACS, and diagnostic screening and treatment associated. Evidence-based method through literature review, expert interviews, and clinical observation are provided. The content of education materials is geared towards awareness with the goal that the general public will be better educated on risks and lifestyle decisions that can affect their cardiovascular system and health as a whole. The poster presentation illustrates steps in the development of these educational materials.

Faculty mentor: Stephanie Unger

TIME-LAPSE PLANTS

Kelly Ketterman



Using my own photographic equipment, grow lights (electricity, set up, bulbs) in my own home, and purchased computer software to generate the time-lapse videos, I germinated seeds, forced blooms, and documented nastic movements in plants.

Faculty mentor: Beth Brantley

DIY PC

James Verdier, Will Yeager, Daryl Alleman, Marisa Leonard, Dell Dickerson & Javier Maldonado



This project consists of building a custom PC from scratch. The computer is composed of a late-model Alienware case, 1TB Hard disk drive, a small outline motherboard, power supply, DVD/CD drive, memory card reader, PCI-Express 1080p graphics and 4GB of DDR2 memory. This machine was built from the ground up and has been optimized for maximum cooling efficiency. In this exhibit we explain the process of building a computer from nothing. We run benchmarks on hardware, install multiple operating systems, and utilize virtualization software. We also compare power testing results.

Faculty mentor: Paul Bart

USING SMART PHONE APPS TO SOLVE DAILY USER PROBLEMS

Cameron Dayley, Brian Steiner, Kyle Trayer; Chris Wiehagen, Anthon Williams & Pat Bowser



This exhibit shows how Smartphone Apps are being used to solve daily user problems. List of Iphone Apps that has been designed by HCI students will include: Portapotty, Kill-A-Watt, Icommute, Isingle, Ibackcheck . The objective of this exhibit is to design an Iphone App that has not been created and follow a procedure of analysis and design methodology.

Faculty mentor: Lila Rajabion

SENSORY INTEGRATION WITH PEDIATRICS

Jenny Peden, Claire Walters & Kayla Carbaugh



We demonstrate how Occupational Therapy uses sensory integration as an important practice model while working with children and adolescents. We have activities on display with handouts explaining how Occupational Therapy would use it in treatment. We discuss Occupational Therapy and the importance of engaging in meaningful occupations.

Faculty mentor: Angie Hissong

WHY WE LOVE: A SCIENTIFIC EXPLANATION

Rebecca Moore, Amanda Napoli & Kristin Moore



Biologically, humans are “wired” to mate and reproduce, and their chemical makeup of hormones, pheromones, and genes tell their bodies with which type of person is right for them. Researchers have found several theories and key components of mating rituals in the humans. This exhibit will present information on different relationship types.

Faculty mentor: Robin Yaure

AUTISM SPECTRUM DISORDER

Deanna Burke, Rachel Barrett & Sharita Statum



Autism is a complex developmental disability that causes problems with social interaction and communication. This project is an educational display used to show the varying challenges that can be faced by a child diagnosed with autism. It explains the early signs and symptoms of autism and emphasizes the need for early intervention.

Faculty mentor: Angie Hissong

SEXUAL HEALTH DECISIONS FOR THE ADOLESCENT

Melissa S. Rogina



Teen pregnancy and sexually transmitted diseases (STD's) are on the rise locally at Waynesboro Area Senior High School. Currently there is no specific program in the school to teach about sexual health and prevention. The project goal is to introduce a sexual health education program into the health classes. The program called "Decisions" developed by Worth the Wait will be adopted as an educational program for the high school students. The content includes all the choices surrounding sex that will face these adolescents as they grow up and facts about sex, STD's and teen pregnancy. Following the program there will be an open discussion with no question being off limits. The poster describes the program from its initiation with the school authority to process of program implementation and the results from this program from student and teacher and school nurse feedback.

Faculty mentor: Stephanie Unger

ART SHOW PARTICIPANTS - 2011

Melissa McCray
William Chong
Alana Rinehart
Anamaria Calixto
Kristyan Gates
Brandy Taylor
Helena DeShong
Robert L. Laughman
Leslie Lemus
Yohana Ghidei
Derek Shives
DaNelle Faison

Gladys Cooper
Tyia Thompson
Matt Charen
Brian Clouse
Rebecca Morey
Orhan Yilmaz
Sijie Cui
Marietta McDonald
Luke Emory Oyler
Stephanie Eickstedt
Nathan Mercer



Award Recipients

Posters

First Place

Tyler Wakefield
Hope for the Eastern Hemlock?

Second Place

Scott Grimm & Derek Furry
Establishing GIS-based permanent forest inventory plots on the Waynesboro Watershed

Third Place

Zachary Hetrick & Seth Morris
Comparing Past Land use to Current Forest Cover Types

Exhibits

First Place

Kimberly Conrad
Eating the right way, the right size, the right times

Second Place (tie)

Jared Fisher
ST-Segment Elevation Myocardial Infarction (STEMI)
Deanna Burke, Rachel Barrett, Sharita Statum Autism Spectrum Disorder

Third Place

Melissa S. Rogina
Sexual Health Decisions for the Adolescent

Art Show

Best of Show	William Chong, "Washy Marley"
First Place (tie)	Orhan Yilmaz "The Red Brick Road" William Chong "Safe and Sound"
Second Place	Stephanie Eickstedt, "Waves of the Sun"
Third (tie)	Marietta McDonald "The Storm" Alana Rhinehart "Cloudy Night"
Honorable Mention	Gladys Cooper, "Coming out of the Darkness" Kristyan Gates "Family Collage" Leslie Lemus, "The Secret Garden" Orhan Yilmaz, "Fair Fax Corner (normal)"

Still Life Category

First Place Leslie Lemus, "Still Life of Cow Skull"
Second Place Robert Laughman "Goat Skull"
Third Place Derek Shives, "Driftwood"

Art Show Judge

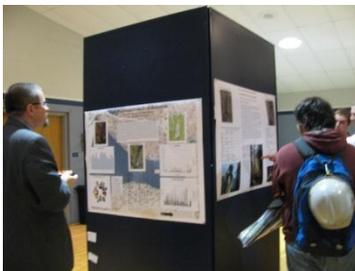
James Smith

Academic Festival Judges

Max Bramel
Ron Evans
Tom Glumac
Frank Kristine
Greg Mahlon
George Pogue
Lisa Ward
Lisa White

Academic Festival Committee

Paul Bart
Beth Brantley
Dion Crommarty
Jennifer Marchand-Reilly
Freya Qually
Lila Rajabion
Tom Reinsfelder
Antonia Spedden
Stephanie Unger
Robin Yaure





Tuesday, April 12, 2011

Mont Alto campus' Academic Festival is Wednesday

MONT ALTO -- The Sixth Annual Penn State Mont Alto Academic Festival will be held on Wednesday and will showcase the work of local students from throughout Franklin County.

The festival displays academic highlights that have been researched, developed, and created by Penn State Mont Alto throughout the academic year.

"This is a great opportunity for students to present the results of their work on undergraduate projects to fellow students and faculty, as well as the local community," said Robin Yaure, Academic Festival Committee Chair.

Individual and group projects cover a wide range of topics including English, engineering, forestry, human development and family studies, nursing, psychology and technology.

In addition to the presentations, a student art show will be held in the Museum of Temporary Art located on the first floor of the General Studies Building. The exhibit will be displayed throughout the day.

Formal academic presentations will take place from Noon to 4 p.m. in the Multiipurpose Activities Center.

The Student Art Exhibit will hold a reception in The Museum of Temporary Art on the first floor of the General Studies Building at 4 p.m.

In addition, awards will be announced in the auditorium of the General Studies Building at 4 p.m.

The festival is free and open to the public.

Area students presenting at the event: Chambersburg (Kayla Carbaugh, James Verdier, Will Yeager, Sydelle Dickerson, Carly Gomer, Mariah English, Jared Fisher, Jennifer Hutsler, Alan Strayer); Fayetteville (Tuesday Joy, Kimberly Conrad, Adam Lynch); Mercersburg (Rachel Barrett, Jenny Peden, Scott Grimm, Kyle Trayer); Shippensburg (Sharita Statum, Derek Furry, Daryl Alleman); Greencastle (Deanna Burke, Cameron Dayley, Jennifer Sandusky); McConnellsburg (Brian Steiner); Waynesboro (Anthon Williams, Patrick Bowser, Marisa Leonard, John Arey, Melissa Rogina); Lemasters (Javier Maldonado).