

# Welcome to the 2<sup>nd</sup> Annual OSCARS Symposium

(Outstanding Scholarship, Creative Activities and Research Symposium)

**A student showcase of scholarly works at  
Anoka-Ramsey Community College  
May 3, 2017**



## Event Schedule:

1:00 Welcome in G202

1:10-2:40 Poster Sessions/Student Displays throughout upper hallways of campus

2:45 Awards for Best Projects in G202

## Project Categories

- 1) Creative Performances and Projects
- 2) Humanities and Social Sciences
- 3) STEM and Health-Related Fields

## **Oral Performances in G202 at 1:10 pm**

### **#1—Triumphus Mortis: An Analysis of Brueghel's "The Triumph of Death"<sup>2</sup>**

**Axel Kylander**

HUM 2271, Heritage of the Western World IV: Renaissance and Reformation –Mentor: Kirsten Dierking

A personal essay examining some of the themes of Pieter Brueghel's 16<sup>th</sup> century painting *The Triumph of Death* as a work of Danse Macabre. Danse Macabre, the Dance of Death, was an artistic genre and line of thought that emerged following the fatal ravages of the Bubonic plague in the 14<sup>th</sup> century. The genre deals with the concept of Death as the inexorable fate of all humans, regardless of their station in society, and in *The Triumph of Death*, this is rendered as a doom that is as terrifying as it is inevitable.

### **#2—Henry David Thoreau: Transcendental Environmentalist and Anti-War Activist<sup>2</sup>**

**Mitchell Mosio**

HIST2211 United States History I – Mentor: Dawn Alexander-Payne

Henry David Thoreau was a leading transcendentalist, an early advocate of environmentalism and an anti-war activist. A proponent of living a mindful, simple life at one with nature, his book *Walden, or, Life in the Woods* explores his transcendental philosophy and its relationship to nature. When the Mexican-American War broke out in the late 1840s he protested the war by refusing to pay his taxes and writing his famous monograph *Civil Disobedience*; this monograph influenced both Mahatma Gandhi and Martin Luther King, Jr.

### **#3—Creative Works of a College Girl<sup>1</sup>**

**Chelsey Schindeldecker**

Creative Writing Club - Mentor: Jennifer Hutchens

College is a time of adventure. Young adults are usually separated from family and friends to be placed in a new school where they may know close to no one. They learn to make friends fast, to live independently, and to fix the mistakes that are bound to happen. We are being pushed out of our nest. We will either fly or fall, but we will not realize which until it is too late.

These creative works are based upon my own experiences or those that I have witnessed throughout my college career. With these works, I explore familiar patterns and lessons faced by the average college student.

## **Posters and Art Projects--Humanities and Social Science Projects—Outside G201/G202**

### **#4—Communication in College Classes<sup>2</sup>**

**Zachary Douglas, Kiana Erickson, Alexis Wiita, Andrew Schumacher**

**CMST 1110: Introduction to Communication – Mentor: Angie Anderson**

The objective of this study is to find if the teacher's perception of how open they are with their students is the same as the student's perception of the teacher's approachability. We surveyed four different classes here on campus with a total of 72 students. According to Punyanunt-Carter and Wagner (2005, p. 569) "College students' perceptions of their college experience are often determined by their instructors' behaviors." Since the student's perspective of their classes determine the value that they put on their college experience, it shows the importance of the perspective from the student. We took the average answer that we got from the students to get an overall idea of the students' perspectives. This study found that the teacher's perception of how open they are is the same as the overall perception from the class of the teacher's approachability.

### **#5—Understanding the Deaf and Deaf Culture<sup>2</sup>**

**Adele Olson, Cassie Fiskewold, Tessa Tschida, Steve Sell, Julie Beenken, Amanda Studt, Susan Bisila**

**Phi Theta Kappa – Mentor: Mackenzie Krzmarzick**

Current active members of the Alpha Delta Upsilon chapter of Phi Theta Kappa decided as a whole to focus on educating ourselves and our community about Deaf culture. Almost all of us had had some interaction with someone who was deaf, whether through school or work, and many noted that it would be beneficial to learn about communicating with deaf members of their community. Research was conducted within our Honors in Action committee and also by individuals. We wanted everyone to have a chance to voice their opinions and have an equal say. Our active members that are currently or have been enrolled in the American Sign Language courses available on our campus have really championed our research topic and took the lead by reaching out to their professor, Rebecca Thomas, M.Ed., for help and participation in our project. We all feel more enlightened through our research and we planned a public presentation with Mrs. Thomas at our campus in order to inform the community. We distributed information pamphlets to businesses in the surrounding areas so that they can better help their employees in serving members of the deaf community.

### **#6—Communicating with Others about Being Bullied<sup>2</sup>**

**Carolyn Helland, Jessica Helland, Colin Alferness, Ryan Stichter, Cynthia Schloer**

**CMST 1110: Introduction to Communication – Mentor: Angie Anderson**

This presentation discusses how, when, and where bullying takes place within college students' lives, and how families can be aware and help in these situations. We conducted a total of 72 surveys from college students to answer these questions. Forty percent responded to have been bullied in middle school, and 41% of these students said they had been bullied by a random person. Of these students, 49% communicated their situation to their parents, 33% said the person they communicated it to helped them resolve the problem, and 52% of all of these students felt better by telling their family. We encourage families to be aware of what takes place and how to be helpful to these students by being personally involved within their academic, social, and personal lives (McClowry, 2017, pp. 82-89).

## **#7—Sociological Imagination<sup>2</sup>**

**Julia Rindahl**

SOC 1102, Relationship, Marriage and the Family – Mentor: Jordan Ruble

My project is on the sociological imagination and how it is related to events in history. The events I focused on were the Civil War and the Revolutionary War. I gave three different events within the two wars and related them to the sociological imagination. As well as I had a broad picture of the sociological imagination listed.

## **#8—The Difference in Communication Skills that Teachers Use Between Mainstream and Special Ed Children<sup>2</sup>**

**Kaitlyn Trytten, Tess Griffin, Larissa Meier, Mariah Westman**

CMST 1110: Introduction to Communication – Mentor: Angie Anderson

In our study, we compare the different teaching skills used for mainstream and special education children in preschool. We observed teachers in three different classrooms, with an average of 15 children per class. We interviewed two mainstream teachers, two special ed teachers, one occupational therapist and one speech pathologist. All of them work with special ed children, but special ed teachers, the occupational therapist, and the speech pathologist work with them more often. We found out that children with special needs do better when seeing pictures and hearing fewer words, while mainstream children learn better by listening to directions. In our interviews, they all say that using pictures instead of words makes the children respond and understand better. We observed several pictures for everything that the children had to do in the special education classroom, including steps on what to do when going to the bathroom, what was needed to go outside, and what steps they were going to do throughout the day. The mainstream preschool we observed had fewer pictures and more verbal instructions.

## **#9—Lessons from Drawing and Painting<sup>1</sup>**

**Chelsey Schindeldecker**

ART 1241, Painting I & ART 1141, Drawing I – Mentor: Marko Marian

While there are many techniques that go into creating a realistic painting or drawing, I will be focusing on linear perspective, proportions, and value.

Linear perspective takes into account how objects appear smaller as they recede into space and allows for objects on a page to appear as though they sit in different points of space. Not only do objects need to be appropriately sized within space but also in comparison to each other, which is why proportions are another important element to making a drawing or painting look realistic. Values are responsible for giving an object a three-dimensional look through expressing lights and shadows captured by an object's surface.

## **#10—Intercultural Competence in the Medical Field<sup>2</sup>**

**Jared Zacharias, Clinton Surina, Tj Husnick, Holly McCoy, Sara Berens**

CMST 1110: Introduction to Communication – Mentor: Angie Anderson

Our group researched the importance of being interculturally competent in the medical field. We used interviews of individuals working in the medical field to obtain data on the benefits of being bilingual in the medical field. Of Spanish speaking households in the US, 47% were not fluent in speaking, writing, or understanding English (Diamond, Tuot & Karliner, 2011). Many students are seeking a degree in the medical field but may not recognize the advantages that being bilingual could give them when it comes to their career.

### **#11—Snowflake: 16"x24" Stained Glass Art<sup>1</sup>**

**Fallow Fahnstock**

ART 1121, Stained Glass I – Mentor: Rick Schneider

This 16"x 24" stained glass piece of art might have more work involved than one might expect. Drawing out a design on paper is the first step in creating a glass masterpiece. This winter, I photographed snowflakes, and this activity gave me the idea for this project. Choosing and buying the glass is the next step. Numbering every segment of the pattern and then all pieces of the glass you have cut makes it easier to assemble the project. Using a grinder, take off the excess edges of cut glass. Copper foil tape then gets pressed around the edge of all glass pieces. The glass is then set on the pattern, which sits on a wooden mold that keeps the glass in place. Flux gets brushed into small areas on the copper edges to hold the spots of solder put on the glass to be fused in place for the actual soldering process. Once the glass is soldered on both sides of the window, the frame is cut to length and soldered in place. All of these elements combine to create a snowflake displayed in a stained glass window.

### **#12—Military Family Stress and Communication<sup>2</sup>**

**Krista Letournuea, Breyza Andrews, Carlie Lyzhof, Hannah Beaufeaux, Lisa Daley**

CMST 1110: Introduction to Communication – Mentor: Angie Anderson

We studied how military families communicate while their loved ones are away and how it influences the quality of their communication. To see if there are any patterns, our group interviewed many individuals who either were in the military themselves, or had/have a loved one in the military. "Military families face an array of disruptive events and stressors, including stress associated with typical life course development (e.g. marital struggles, parenting teenagers) and stress attributed to military life (e.g. deployments, relocations). Literature on family functioning suggests that family well-being is a reflection of the family's ability to manage stress. The family's relational health can serve as a gauge for how the family is collectively coping and addressing challenges." O'Neal, C. Walker, Lucier-Greer, M., Manici, J. A., Ferraro, A. J. & Ross, D. B. (2016, February). Family relational health, psychological resources, and health behaviors: A Dyadic study of military couples. *Military Medicine* 181, 2, 152-160.

### **#13—Sociological Imagination: Civil Rights Movement and Black Lives Matter**

**Hannah Stahnke<sup>2</sup>**

SOC 1111, General Sociology – Mentor: Jordan Ruble

Exploring society norms of prejudice in different time periods, specifically describing racism today and its striking similarity to the 1960s. Through the use of comparable photos and events will defend the thesis that racism still exists. This will demonstrate the Civil Rights Movement and the movement Black Lives Matter both pursue similar goals and both received similar backlash. Although each group used different methods to promote their ideals due to different time periods and its societal norms, both movements desired justice in equal arenas.

### **#14—A Man's World<sup>2</sup>**

**Melissa Smith, Cyrena Lehmann, April Farber, Madalynn Carlson, Gregory Elvik**

CMST 1110: Introduction to Communication – Mentor: Angie Anderson

It is common knowledge that inequality exists in the society we live in. To explore this inequality in the realm of video games, a survey was conducted amongst a sample of students from Anoka Ramsey Community College. This survey asked participants ten questions in regard to whether or not they had experienced harassment during online gaming, whether or not harassment they experienced was based upon that person's gender, and how being harassed online made them feel. In addition to this survey, database research was performed supporting the notion that everything from the design of video games to the nature of online communication supports and perpetuates hostility toward women.

### **#15—How Parents and Teachers Perceive their Communication to Influence a Child's Education<sup>2</sup>**

**Megan Claassen, Nolan Hentges, Brad Slaughter, Josh Bohnen, Jessica Bustrom**

CMST 1110: Introduction to Communication – Mentor: Angie Anderson

We went to surrounding school districts and interviewed various parents and teachers to see what their thoughts were on parent-teacher communication. Shirvani examined that parent/teacher communication vastly improved student test scores and confidence, while diminishing referrals to the principal's office. (Shirvani, 2007). 100% of the 30 parents and teachers that we interviewed agreed that parent/teacher communication was important. We will share with you statements they made in regards to the importance of parent-teacher communication.

### **#16—The Effects of Different Catalysts on the Activation Energy of the Decomposition of Hydrogen Peroxide<sup>3</sup>**

**Dean Beenken, Charles Larson, Austin Gustafson, Jake Fixell**

CHEM 1062, Principles of Chemistry II – Mentor: Andy Aspaas

A new method for determining activation energy in a single trial using temperature and time data is investigated using the catalytic decomposition of hydrogen peroxide and a variety of catalysts including potassium iodide, manganese oxide, and hemoglobin.

### **#17—The Effect of Particle Size on Color Properties in Solutions of Semiconductor Compounds<sup>3</sup>**

**Becca Nelson, Jonah Hinks, Chip Vang**

CHEM 1062, Principles of Chemistry II – Mentor: Andy Aspaas

When suspended nanoscale particles are produced under different conditions, the particles can have different sizes and therefore different optical properties. The relationship between reaction conditions, particle size, and color are investigated with a known system and several new systems.

### **#18—Relationship of Temperature, Concentration, and Solution Type with Conductivity<sup>3</sup>**

**Regina Zabinski, Richard Flannery, and Rachel Geurts**

CHEM 1062, Principles of Chemistry II – Mentor: Andy Aspaas

The electrical conductivity of a solution is influenced by concentration, solution type, and temperature. These effects are investigated to construct a mathematical relationship with substances not previously reported.

### **#19—The Effects of Light Therapy on Sleepiness During Night Shift Work<sup>3</sup>**

NURS 2800, Chronic and Palliative Care – Mentor: Shawn Meyer

Researcher: Robin Parr, Erin Saari, April Stancer

The purpose of this study was to assess the effects of using a 5,000 Lux therapy light prior to/during a natural circadian rhythm "dip" in alertness to decrease sleepiness during night shift work. A survey was created to rate fatigue and sleepiness before, during, and after light therapy.

## **#20—Effects of Wildflower Field Management Practices on Pollinating Insect Counts<sup>3</sup>**

**Pheylan Anderson**

Independent Study - Mentor: Melanie Waite-Altringer

Recently, the United States has seen a prevalent decline in beneficial pollinating insects. Pollinating insects are essential to human and other animal's food supplies and to local ecosystem health. Finding methods to stabilize their population is urgent. This study compared different types of wildflower field management techniques to see if there would be a positive or negative effect on the amount of pollinating insects visiting the field. The central question was, will different field management techniques affect the growth of wildflowers and pollinating insect counts? The prediction is, if the management techniques affected wildflower growth, then the highest density of wildflowers and pollinating insects would be seen in the disked and seeded plots due to faster nutrient recycling, elimination of shade, and a higher seed density. Pollinating insects and flower density were recorded on each plot once a week throughout the 2016 summer flowering season at a 25-acre demonstration plot located on the Cambridge campus of Anoka Ramsey Community College (ARCC). Insects were counted by observers walking each plot for two minutes. Data analysis showed that Plot B, the disked and unseeded section, had the highest insect counts throughout the season. Plot B likely supported plants that attracted pollinators for longer periods, and in greater numbers, than the other plots did. The results suggest that simply lightly disked a large wildflower plot is the best method for attracting pollinators and does not have as great an effect on flower density.

## **#21—Hydrolytic Activity of Actinomycetales Found in Intestines of Captive Wolves<sup>3</sup>**

**Rebecca Watry**

BIOL 2201, Microbiology – Mentor: Scott Danneman

Reintroduction of Mexican gray wolves (*Canis lupus baileyi*) into the wild has had limited success. There is increasing evidence on the critical role of intestinal bacteria in overall health. We aimed to identify and functionally characterize intestinal bacteria residing in the endangered *Canis lupus baileyi* (*C. lupus baileyi*) and thriving Great Plains gray wolf *Canis lupus nubilus* (*C. lupus nubilus*) to aid the *C. lupus baileyi* conservation effort. We hypothesized that *C. lupus baileyi*'s distal gut microbiota may be distinct and potentially less diverse than its healthy counterparts'. Identification of captive *C. lupus baileyi* and *C. lupus nubilus* intestinal bacteria was done utilizing culture-dependent isolation, genetic analysis by 16S rRNA gene sequencing and clinical analysis including zymography. Novel bacteria with hydrolytic activity were identified within the Actinomycetales order including the genera: *Knoellia*, *Janibacter*, and *Streptomyces* only from *C. lupus baileyi*'s isolates. Future studies may show differences in greater detail and determine if the microbiome's differences are contributing to *C. lupus baileyi*'s inability to thrive in the wild.

## **#22—Effects of Light Therapy on Sleepiness During Studying<sup>3</sup>**

**April Stancer, Robin Parr, Erin Saari**

NURS 2800, Chronic and Palliative Care – Mentor: Shawn Meyer

To test the effects of light to tell the brain to be awake, a 5,000 Lux light was used during study periods when sleepiness tends to occur. A survey was created for participants to rate fatigue and sleepiness before and after light therapy use.