

THURSDAY & FRIDAY, APRIL 19-20, 2018



FEATURING



PHILIP AABERG

KEYNOTE SPEAKER
AND CONCERT
FRIDAY, APRIL 20
7:30 PM
CISEL RECITAL HALL

MSU BILLINGS
JAZZ ENSEMBLE
CONCERT
7:30 PM
THURSDAY, APRIL 19
CISEL RECITAL HALL

Refreshments can be found on the 2nd floor during the Conference

Ice Cream Social at 3:30

THANK YOU TO ALL FACULTY WITH STUDENT PARTICIPANTS

Dr. James Barron

Dr. Melissa Boehm

Dr. David Butler

Dr. Tien Chih

Dr. Brent Finger

Dr. Sarah Friedman

Dr. Lynn George

Dr. Susan Gilbertz

Ms. Tami Haaland

Dr. Joy Honea

Dr. Scott Jeppesen

Dr. Tom Lewis

Dr. Jennifer Lynn

Dr. Ambrin Masood Dr.

Matt McMullen

Dr. Virginia Lee Mermel

Dr. Paul Nash

Dr. Matt Queen

Mr. John Roberts

Dr. Alex Shafer

Mr. Andrew Sullivan

Dr. Kurt Toenjes

APRIL 19 th				
Reception for Juried Student Exhibition LA first floor				
Jazz Band Concert Cisel Recital Hall				

APRIL 20 th						
11:00	Participant Registration and Poster Set-Up					
12:30	Keynote Speaker in Petro Theater					
1:15	Poster Presentations begin – 1 st and 2 nd floor of the SUB atrium					
SUB 134 Presentations						
	Faculty Moderator: Tami Haaland					
1:15	Hola' Jesus William Segerstrom					
1:30	Advanced Poetry Justin Baeten, Haley Barthuly, Korrin Dietz, Avery Jam, Ashley Merical, Emily Ungefug, Mike Wade					
2:00	Literary Reading Charles Carr, Nathan Miller, Hannah Overholt, Darcie Tokar					
SUB 135 Presentations						
Faculty Moderator: David Craig						
2:30	How Certain Are You That You Have a Good Memory? Miglena Ivanova					
2:45	Food Waste and Insecurity among MSUB Students: Haley Barthuly, Danielle Branson, Anne Lory Chevalier, Jennifer Downing, Miglena Ivanova, Brittney Mill					
Music Presentations						
3:15	MSUB Low Brass Ensemble Danielle Branson, Tucker Heller, Collin Sitton, Seth Ullman					
3:30	Old Souls Ensemble Alex Bush, Sarah Farris, Emerald Hart, Malia Howell, Brooke Moncada, Maggie Schwarz, Collin Sitton					
3:00 – ICE CREAM SOCIAL – RIMROCK CAFE						
7:30	Philip Aaberg Concert Cisel Recital Hall					

KEYNOTE SPEAKER

Mr. Philip Aaberg

Composer and Pianist

Metacognition, Creativity and Connection on the High Plains

Grammy and Emmy nominated composer Philip Aaberg will explore the roots of creativity and its relationship to place, in his case to the spaciousness and beauty of the Western landscape.

Aaberg's musical career is as diverse and expansive as the Montana landscape he calls home. After graduating from Harvard, Aaberg later moved to San Francisco, California, to make pop and rock records. He played solo and in small combos in San Francisco blues clubs until joining the Elvin Bishop Group in 1973. He first appeared on the national scene as keyboardist with The Elvin Bishop Band. He toured with the band for four years and played on several of their albums.

Aaberg later toured with Peter Gabriel and recorded with the Doobie Brothers, Kenny Rogers and Vince Gill. He began composing his own music seriously in 1985. Shortly after, he signed with Windham Hill Records and released the influential and critically-applauded solo album "High Plains," which garnered him international acclaim. It was a solo piano suite that brought elements of blues, bluegrass, rock, and new music to his meditative compositions. It showcased his eclectic musical background. It was an immediate hit.

Aaberg has played with the Boston Pops, participated in the Marlboro Chamber Music Festival, premiered contemporary compositions with the Paul Dresher Ensemble, and performed on more than 200 albums and on PBS' "All-American Jazz," which also earned him an Emmy nomination. Another Emmy nomination followed in 2008 for his soundtrack for "Class C: The Only Game in Town," produced by Montana PBS.

Philip Aaberg in Concert April 20, 7:30 PM Cisel Recital Hall

Tickets available for purchase during the Conference



PRESENTERS

Baeten, Justin

Title: Advanced Poetry

Faculty Mentor: Tami Haaland

Major: English

Project Narrative: Students from the Poetry Workshop class will read and discuss their work.

Barthuly, Haley

Title: Advanced Poetry

Faculty Mentor: Tami Haaland Major: Political Science

Project Narrative: Students from the Poetry Workshop class will read and discuss their work.

Barthuly, Haley

Title: Food Waste and Insecurity among MSUB Students Faculty Mentor: Virginia Lee Mermel, Maia Dickerson

Major: Political Science

Project Narrative: This study attempts to demonstrate the amount of food waste on campus and find ways to reduce food insecurity by promoting more efficient use of the resources on campus and in the community. An anticipated result of this study is to spread awareness of the resources that are available to reduce the amount of food waste, and decrease food insecurity among students.

Becker, Kelda

Title: Using Neural Networks to Classify Cattle Breeds

Faculty Mentor: Tien Chih Major: Mathematics

Project Narrative: We used neural networks to classify cattle breeds. Several approaches were implemented due to the limitations of the data. In this demonstration, we present the theory, methodology, and final results.

Boumediene, Synda

Title: Analysis of Modified Vaccinia Ankara Tropism and Growth Condition

Faculty Mentor: Paul Nash

Major: Biology

Project Narrative: We employed a mutant form of the virus, modified vaccinia Ankara (MVA) to establish how different culture and infection conditions affect virus growth. Vaccinia is a large enveloped virus belonging to the poxvirus family that is used as a vaccine for smallpox. Recombinant vaccinia is also used as a vaccine for multiple other diseases.



Branson, Danielle

Title: Food Waste and Insecurity among MSUB Students Faculty Mentor: Virginia Lee Mermel, Maia Dickerson

Major: Music Performance and Education

Project Narrative: A study that attempts to demonstrate the amount of food waste on campus and find ways to reduce food insecurity by promoting more efficient use of the resources on campus and in the community. An anticipated result of this study is to spread awareness of the resources that are available to reduce the amount of food waste, and decrease food insecurity among students.

Branson, Danielle

Title: MSUB Low Brass Ensemble Faculty Mentor: John Roberts

Major: Music Performance and Education

Project Narrative: A low brass group performing 2 short pieces: Down in the River to Pray arranged by

Christopher Warren and Two Chorales by Brahms.

Brown, Rachel

Title: Validating the Speed and Accuracy of the Adidas® miCoach Smart Soccer Ball Using a Radar Gun and the

Adidas Smart Ball App Faculty Mentor: Alex Shafer

Major: Health and Human Performance

Project Narrative: The new Adidas® miCoach Smart Ball is purportedly capable of providing the athlete with feedback on the ball's speed, spin, strike and its flight path. The purpose of this study was to investigate the validity and reliability of the Adidas® miCoach soccer ball for determining the velocity of a soccer ball. A secondary aim is to determine of the Adidas® Smart Ball produces similar velocities as a regulation soccer ball.

Buksch, Richard

Title: Effects of Dopamine Beta Hydroxylase Mis-regulation in a Mouse Model of FD

Faculty Mentor: Lynn George Major: Biology, Chemistry

Project Narrative: Dopamine beta hydroxylase (DBH) converts dopamine to norepinephrine in chromaffin cells of the adrenal gland; a reduction in the levels of DBH is thought to cause an increase of circulating dopamine, which in turn leads to symptoms such as extreme vomiting and nausea, among others. Familial dysautonomia shares many of these same symptoms, and we've shown, using a mouse model of the disease, that DBH transcription levels are also reduced. Using western blot, immunohistochemistry, and ELISA techniques, we are investigating the levels of DBH protein and dopamine in both the adrenal gland and circulating blood.

Bullington, Baylie

Title: Narcissism and Kim Kardashian's Instagram: A textual analysis

Faculty Mentor: Melissa Boehm Major: Organizational Communication

Project Narrative: This study attempts to determine if followers value narcissism on Kim Kardashian's Instagram account using the theory of narcissism. This study used a textual analysis in which pictures were coded on Kardashian's Instagram, to determine what photos received the most "likes." Support of narcissistic habits on Instagram could imply a broader societal support of narcissism.

Burkett, Brooke

Title: Life is Beautiful in a concentration camp: A textual analysis of Roberto Benigni's Life is Beautiful

Faculty Mentor: Melissa Boehm

Major: Organizational Communication

Project Narrative: Life is Beautiful is a 1998 film directed and starring Roberto Benigni which features

stereotypical themes and a light-hearted portrayal of a family during the Holocaust. Media representation and

textual analysis are used to analyze the way the media presents the characters and the Holocaust.

Bush, Alex

Title: Old Souls Ensemble Faculty Mentor: John Roberts

Major: Music

Project Narrative: The group Old Souls, a new music ensemble at MSU Billings, will arrange and perform

American Soul music. Includes 4 vocalists, 4 horns, and rhythm section.

Carr, Charles

Title: Literary Reading

Faculty Mentor: Tami Haaland Major: Pre-Professional Nursing

Project Narrative: Students from CRWR 240, Introduction to Creative Writing, will share examples of their

poetry or other literary work. Questions from the audience are welcome.

Case, Raechyl

Title: The Constructed Nature of "The Bachelor": A textual analysis

Faculty Mentor: Melissa Boehm

Major: Liberal Studies

Project Narrative: This project examines the constructed nature of the first and last episode of season 20 of the reality TV show "The Bachelor," which aired in 2016. Through Media Representation Theory and textual analysis, the aspects and constructions of love that appear to be realistic may be more contrived than the program wants viewers to believe.

Chevalier, Anne Lory

Title: Food Waste and Insecurity among MSUB Students Faculty Mentor: Virginia Lee Mermel, Maia Dickerson

Major: Criminal Justice

Project Narrative: This study attempts to demonstrate the amount of food waste on campus and find ways to reduce food insecurity by promoting more efficient use of the resources on campus and in the community. An anticipated result of this study is to spread awareness of the resources that are available to reduce the amount of food waste, and decrease food insecurity among students.



Clarkson, Kendra D.

Title: Confirmation or Contradiction: A Content Analysis of Gender Roles in TV Commercials Aired During the

2018 Olympic Games Faculty Mentor: Joy Honea

Major: Sociology & Human Services

Project Narrative: While women were long excluded from organized sport and have a well-documented history of being trivialized, sexualized, and ignored by media, the Olympics have a somewhat better record of inclusion and representation. Advertisements, however, make up roughly 25% of Olympic telecasts, and are therefore uniquely positioned to influence overall messages conveyed about gender roles, either confirming gender stereotypes of women by depicting them in insignificant, limited, decorative capacities or contradicting them by presenting women as diverse, relevant, and able. This research project examined the portrayal of gender roles in TV commercials aired during the 2018 Olympic Games.

Colarchik, Leigh

Title: Billings Employers' Hiring Policies Concerning Those with Criminal Records

Faculty Mentor: Joy Honea

Major: Criminal Justice, Sociology

Project Narrative: This research project conducted an anonymous survey of the hiring policies of Billings businesses concerning those with criminal records. This study will identify if a correlation exists between business types and their hiring policies to specific criminal records as well as why those business types would not hire an applicant due to the specific offence.

Colmenero Hernandez, Daniel

Title: Do Students' Attitudes About Marijuana Legalization Vary According to their Major Field of Study?

Faculty Mentor: Joy Honea Major: Criminal Justice

Project Narrative: This study examines students' attitudes regarding marijuana legalization categorized by their major field of study. How does a business major, for example, think about legalizing marijuana as compared to

a student in the education program?

Coons, Chelsea

Title: Investigating the Binding of BH3I-1 Derivatives to the Bcl-XL Protein

Faculty Mentor: David Butler

Major: Biology

Project Narrative: In order to develop promising drugs for infectious disease, it is important to find molecules that specifically target the infectious agent without harming human cells. The Butler/Toenjes Lab has recently published an article showing that a small organic molecule called BH3I-1 and several of its derivatives have potent anti-fungal activity against *Candida albicans*, a common human pathogen. BH3I-1, however, is known to be toxic to human cells through binding to the Bcl-XL and Bcl-2 proteins. The goal of this project is to identify anti-fungal derivatives of BH3I-1 that do not bind the Bcl-XL and Bcl-2. Such BH3I-1 derivatives would have the potential for low human cell toxicity.

Deavila, Kaz

Title: Stranger Texts: An Intertextual Analysis of Stranger Things

Faculty Mentor: Melissa Boehm Major: Mass Communication

Project Narrative: This project studies season two of the Netflix series *Stranger Things* which is set in the 1980s. This was an intertextual analysis where frequencies were recorded for each unique instance of an outside media property or its likeness within the *Stranger Things* universe; thereafter the IMDb user rating for each episode was gathered to see if there was any correlation in higher frequencies equating to higher ratings.

Degel, Benjamin

Title: Intervention Programs for Elementary Age Children in Montana Schools

Faculty Mentor: Joy Honea Major: Sociology, Criminal Justice

Project Narrative: This project involves research into programs available in Montana elementary schools for children victims of domestic violence. These findings have the potential to spread awareness of the available programs for children in elementary schools as well as the programs that should be available. The goal of this research is to provide Montana's elementary schools with forward-thinking intervention solutions when dealing with students who may have been domestic violence victims.

Dettling, Megan

Title: Student Athletes' Attitudes towards Title IX

Faculty Mentor: Joy Honea Major: Criminal Justice

Project Narrative: My project examines a difference between male and female athletes' attitudes about Title

IX, to see if there are gender differences.

Dietz, Korrin

Title: Advanced Poetry

Faculty Mentor: Tami Haaland

Major: English

Project Narrative: Students from the Poetry Workshop class will read and discuss their work.

Downing, Jennifer

Title: Food Waste and Insecurity among MSUB Students Faculty Mentor: Virginia Lee Mermel, Maia Dickerson

Major: Organizational Communication

Project Narrative: This study attempts to demonstrate the amount of food waste on campus and find ways to reduce food insecurity by promoting more efficient use of the resources on campus and in the community. An anticipated result of this study is to spread awareness of the resources that are available to reduce the amount of food waste, and decrease food insecurity among students.

Egeland, Jorey

Title: PDTC and PDTC Derivative Synthesis

Faculty Mentor: Matt Queen

Major: Biology

Project Narrative: Carbon tetrachloride (CCl4) is a known environmental contaminate. This research attempts to develop potential CCl4 remediation techniques. This is done by synthesizing 2,6-pyridinedithiocarboxylic (PDTC) along with several PDTC derivatives. The specific derivatives synthesized in this experiment were V(PDTC) and Co(PDTC). We are interested in the dechlorination properties of the individual derivatives. We also hope to better understand the link between the derivatives' electronic structure and reactivity. We monitored the success of our synthesis by using the IR spectrometer.

Eslinger, Mariah

Title: Challenges Millennials Face in Society Today

Faculty Mentor: Joy Honea Major: Criminal Justice, Sociology

Project Narrative: This study is about what challenges millennials face in society today. Students were surveyed on which social issues they think are important, which include such topics as racial inequality, religion, education, and social media. In examining what this generation thinks are important issues, there is a glimpse into what society's future leaders believe.

Eversole, Alex

Title: Ethanol Fuel Production Economics

Faculty Mentor: Andy Sullivan Major: Process Plant Technology

Project Narrative: We explored the ethanol fuel production cost from Montana crops including wheat and barley. Our calculations and explorations covered production costs such as labor, ingredients and equipment

for the small scale producer.

Farris, Sarah

Title: Old Souls Ensemble Faculty Mentor: John Roberts

Major: Music

Project Narrative: The group Old Souls, a new music ensemble at MSU Billings, will arrange and perform

American Soul music. Includes 4 vocalists, 4 horns, and rhythm section.

Focht, Katelyn

Title: Yellowstone County Veterans Treatment Court Evaluation

Faculty Mentor: Joy Honea

Major: Sociology

Project Narrative: This program evaluation will be looking at the 13th Judicial District Veterans Treatment Court to evaluate the success of U.S. military veterans using such factors as employment status. This study provides data on whether the Treatment Court can be a more useful way to rehabilitate criminal offenders rather than prison sentences.



Gallup, Sarah

Title: Effects of shelter quality or pheromones on territorial behavior of Paruroctonus boreus

Faculty Mentor: Jim Barron

Major: Biology

Project Narrative: Behavior was studied while observing Paruroctonus boreus, (a northern scorpion). The

shelter quality and separately pheromone effects were observed.

Gillespie Kotar, Kiersten

Title: The Importance of Support Systems: Involvements of Loved Ones and the Reintegration of Offenders

Faculty Mentor: Joy Honea

Major: Criminal Justice, Sociology

Project Narrative: This project is intended to look at the different organizations in Billings that work with offenders and their loved ones during reintegration. There have been comparatively few findings about how well the programs actually work to reduce the risk of recidivism.

Hall, Mathew

Title: Study of 1-12 grade earth science topics in Billings area schools

Faculty Mentor: Sarah Freidman

Major: Biology and Broadfield Science Education

Project Narrative: The different properties of minerals allow for young and old students to identify these materials with different levels of comprehension (Bloom's Taxonomy). We believe that students from Billings naturally have a curiosity for the geology they see every day, all around them. This project would help provide a basic understanding of geology and propel students to ask higher-order questions about the natural world.

Hart, Emerald

Title: Old Souls Ensemble Faculty Mentor: John Roberts

Major: Music Business

Project Narrative: The group Old Souls, a new music ensemble at MSU Billings, will arrange and perform

American Soul music. Includes 4 vocalists, 4 horns, and rhythm section.

Helfrich, Garrett

Title: Campus Concealed-Carry Proposal

Faculty Mentor: Joy Honea Major: Criminal Justice

Project Narrative: This project explores whether concealed handgun carry would make a positive or a negative

impact on campus safety. Previously collected data has shown a positive reaction to the introduction of

concealed handgun carry in a specific area. Student surveys reveal attitudes toward this issue.

Heller, Tucker

Title: MSUB Low Brass Ensemble Faculty Mentor: John Roberts Major: Automotive Technology

Project Narrative: A low brass group performing 2 short pieces: Down in the River to Pray arranged by

Christopher Warren and Two Chorales by Brahms.



Herman, Tanner

Title: Pipe Threading

Faculty Mentor: Andy Sullivan Major: Process Plant Technology

Project Narrative: We are going to show the steps of how to properly thread pipe. We are also going to show how to not thread pipe. We will show the safety precautions that need to be taken so you don't hurt yourself

or another person.

Houston, Kelton

Title: Synthesis and Characterization of [Pd(PDTC)L] Coordination Compounds

Faculty Mentor: Matt Queen Major: Chemistry, Biology

Project Narrative: Carbon Tertrachloride (CT) is a popular industrial solvent, and potential environmental contaminant of water and soil. An approximate ten-square kilometer plume of soil at the Department of Energy's site in Hanford, Washington, has been polluted with CCI4. Our research is based on the study of potential CT environmental remediation technologies with a specific interest in the dechlorination properties

of PDTC (2,6-pyridinedithiocarboxylic acid) and its Copper-Coordination compounds, [Cu(PDTC)L].

Howell, Malia

Title: Old Souls Ensemble Faculty Mentor: John Roberts

Major: Music Performance and Education

Project Narrative: The group Old Souls, a new music ensemble at MSU Billings, will arrange and perform

American Soul music. Includes 4 vocalists, 4 horns, and rhythm section.

Ivanova, Miglena

Title: How Certain Are You That You Have a Good Memory?

Faculty Mentor: Matt McMullen

Major: Psychology, Psychiatric Rehabilitation

Project Narrative: Even though people are often certain that their memory of common items is good, multiple studies have shown its actual faultiness. The present study examines whether or not interest in a certain area and overall long-term memory will lead to higher recall accuracy. My findings were consistent with previous research and further proved how faulty people's memory of common items is and how simple repetitive exposure with no intention to learn does not lead to a good memory.

Ivanova, Miglena

Title: The Use of Corporal Punishment on Children - Arguments, Research, and Limitations

Faculty Mentor: Brent Finger

Major: Psychology, Psychiatric Rehabilitation

Project Narrative: One controversial issue in psychology, the use of corporal punishment to discipline, has not had a definite solution yet. This research summarizes some of the findings of journal papers and meta-analyses on the outcomes of the use of corporal punishment, while it looks at the different sides of the argument and many of the limitations that restrict the ability to prove causation between spanking and later outcomes.



Ivanova, Miglena

Title: Food Waste and Insecurity among MSUB Students Faculty Mentor: Virginia Lee Mermel, Maia Dickerson

Major: Psychology, Psychiatric Rehabilitation

Project Narrative: This study attempts to demonstrate the amount of food waste on campus and find ways to reduce food insecurity by promoting more efficient use of the resources on campus and in the community. An anticipated result of this study is to spread awareness of the resources that are available to reduce the amount of food waste and decrease food insecurity among students.

Jam, Avery

Title: Advanced Poetry

Faculty Mentor: Tami Haaland

Major: English

Project Narrative: Students from the Poetry Workshop class will read and discuss their work.

Jones, Emily

Title: Opinions and Attitudes on Hookup Culture

Faculty Mentor: Joy Honea

Major: Criminal Justice, Sociology

Project Narrative: This project studied the opinions and attitudes of hookup culture among MSU-Billings students. Using the theory of symbolic interaction, it will look at how hookup culture is viewed and the

emotional or mental impact it has on students.

Klein, Alex

Title: Star Wars. An analysis of the familiar: A Proppian Analysis

Faculty Mentor: Melissa Boehm

Major: Liberal Studies

Project Narrative: This project analyzes *Star Wars*, the 1977 film that captivated audiences worldwide with its blend of familiar, old-fashioned storytelling mixed with science fiction fantasy. I used Joseph Klapper's Reinforcement Theory combined with the Proppian Analysis method to code for specific functions in the film as they relate to classic storytelling.

Kramer, Lucy

Title: Environmental Studies Program Assessment - The Evolution of Political Bias in Writing

Faculty Mentor: Susan Gilbertz

Major: History

Project Narrative: In evaluating essays for the Environmental Studies Program Assessment, I noticed instances of politically-biased language. My research is based on the question, "Do political biases decrease as students progress through the program?"

Lloyd, Cameron

Title: Pipe Threading

Faculty Mentor: Andy Sullivan Major: Process Plant Technology

Project Narrative: We are going to show the steps of how to properly thread pipe. We are also going to show how to not thread pipe. We will show the safety precautions that need to be taken so you don't hurt yourself or another person.



Lujan, Krista

Title: Rimrock Foundation Treatment Program Evaluation

Faculty Mentor: Joy Honea Major: Criminal Justice

Program Narrative: This project studied treatment programs offered at a local facility, Rimrock Treatment Foundation. It will focus on the reasons behind treatment at their facility and evaluate their treatment methods. The goal is to see if the programs that are offered are helping individuals with their addictions.

Lurie, Daniel

Title: Literary Reading

Faculty Mentor: Tami Haaland

Major: Organizational Communication

Project Narrative: Students from CRWR 240, Introduction to Creative Writing, will share examples of their

poetry or other literary work. Questions from the audience are welcome.

Mazurkiewicz, Patti Jo

Title: The Impact of Culture-Specific Education/Ethnic Identity on Resiliency among Native American Middle

School Students

Faculty Mentor: Ambrin Masood

Major: M.S. Clinical Rehabilitation and Mental Health Counseling

Project Narrative: A feasibility study researching the correlation between cultural education and resiliency in Native American middle school students. Hypothesis – a positive relationship exists between cultural/ethnic

identity and resilience.

Merical, Ashley

Title: Advanced Poetry

Faculty Mentor: Tami Haaland Major: English Education

Project Narrative: Students from the Poetry Workshop class will read and discuss their work.

Michael, Conner

Title: Pipe Threading

Faculty Mentor: Andy Sullivan Major: Process Plant Technology

Project Narrative: We are going to show the steps of how to properly thread pipe. We are also going to show how to not thread pipe. We will show the safety precautions that need to be taken so you don't hurt yourself

or another person.

Mill, Brittney

Title: Food Waste and Insecurity among MSUB Students Faculty Mentor: Virginia Lee Mermel, Maia Dickerson

Major: Psychology

Project Narrative: A food waste study that attempts to demonstrate the amount of food waste on campus and find ways to reduce food insecurity by promoting more efficient use of the resources on campus and in the community. An anticipated result of this study is to spread awareness of the resources that are available to reduce the amount of food waste and decrease food insecurity among students.

Miller, Nathan

Title: Literary Reading

Faculty Mentor: Tami Haaland Major: Criminal Justice, Sociology

Project Narrative: Students from CRWR 240, Introduction to Creative Writing, will share examples of their

poetry or other literary work. Questions from the audience are welcome.

Minch, Nora

Title: I'm sorry the old Taylor can't come to the phone right now: A rhetorical analysis

Faculty Mentor: Melissa Boehm

Major: Mass and Organizational Communication

Project Narrative: Taylor Swift's sixth album *Reputation* creates a dark and haunting image of the artist who is not just out for "Bad Blood" anymore. In the album, Swift wants to set the record straight and tell her side of her own story, which has been ignored in the media. I used media representation theory and rhetorical analysis to examine Taylor Swift's "Look What You Made Me Do" music video and song lyrics with a lens that considers the construction of image in the media.

Moen, Curtis J.

Title: Why School Shootings Occur: An Analysis of Recent Research

Faculty Mentor: Joy Honea Major: Criminal Justice

Project Narrative: A content analysis of peer-reviewed journals that describes the risk factors researchers have presented regarding why school shootings occur. Through a progressive, deductive focus and the use of coding, this project identifies the main themes presented in research and areas where research might be lacking.

Moncada, Brooke

Title: Old Souls Ensemble Faculty Mentor: John Roberts

Major: Music Performance, Mass Communication

Project Narrative: The group Old Souls, a new music ensemble at MSU Billings, will arranges and performs

American Soul music. Includes 4 vocalists, 4 horns, and rhythm section.

Morast, Daisy

Title: Ethanol Fuel Production Economics

Faculty Mentor: Andy Sullivan Major: Process Plant Technology

Project Narrative: We explored the ethanol fuel production cost from Montana crops including wheat and barley. Our calculations and explorations covered production costs such as labor, ingredients and equipment

for the small scale producer.



Nedens, Bailey

Title: A Shopping We Go: Victorian Middle-Class Women and London's Department Stores and West End

Shopping District

Faculty Mentor: Jennifer Lynn

Major: History

Project Narrative: Often times, when one examines middle-class women, they recall their traditional role as wife, mother, and domestic overseer: a view that rings especially true in regards to British middle-class women of the late Victorian era. Through the use of scholarly primary and secondary sources, this essay will examine the traditional expectations of British middle-class women and how shopping during the late nineteenth century played a large role in leading these women into spaces they did not normally occupy.

Nelson, Carmen

Title: Yellowstone River Cultural Inventory

Faculty Mentor: Susan Gilbertz Major: Environmental Studies

Project Narrative: My poster will show a qualitative investigation on ranchers in the Yellowstone Valley, specifically along the Yellowstone River. This study shows the primary concerns are about drought, climate

change, the river, and pollution.

Olson, Martin

Title: Construction of a CRISPR-Cas9 system for use in Pseudomonas aeruginosa genome editing

Faculty Mentor: Tom Lewis

Major: Biology

Project Narrative: This work involves adapting plasmid vectors currently in use with E. coli for the opportunistic human pathogen P. aeruginosa (PA). Techniques of PCR amplification and Gibson assembly are being used to create plasmid vectors which will allow directed alteration of the PA chromosome.

Ostermiller, Brady

Title: Economics of Pelletizing Straw for Fuel

Faculty Mentor: Andy Sullivan Major: Process Plant Technology

Project Narrative: This presentation will investigate pelletizing straw to be burned in a wood stove. It will look into the benefits as well as the challenges that would need evaluation before production is started. This will be done by looking at the economics associated with the production.

Overholt, Hannah

Title:

Faculty Mentor: Tami Haaland

Major: General Studies

Project Narrative: Students from CRWR 240, Introduction to Creative Writing, will share examples of their

poetry or other literary work. Questions from the audience are welcome.

Polkow, Landon

Title: Police Presence on Campus Faculty Mentor: Joy Honea Major: Criminal Justice

Project Narrative: This project explores the relationship between students and campus police officers. A survey of 100 MSUB students reveals attitudes toward safety and trust related to campus police. This project hopes find answers that support campus police, but the investigator is aware that some students may harbor negative attitudes.

Paluch, Trenton

Title: Protecting Hearing in an Industrial Setting

Faculty Mentor: Andy Sullivan Major: Process Plant Technology

Project Narrative: Sound levels were measured in the Process Plant Technology lab with a cellular phone app. Sound energy levels were compared with OSHA limits for various equipment, and a hearing protection map

was developed.

Perna, Maria

Title: Yellowstone Cultural Inventory Faculty Mentor: Susan Gilbertz Major: Environmental Studies

Project Narrative: This project is a continuation of research that has been ongoing for 12 years. People in different fields were interviewed and re-interviewed to gather their economic, recreational, and political concerns regarding the Yellowstone River. The goal of this project is to map out any similarities and differences between interviewee comments/concerns to show overlapping concerns or topics of interest of citizens and officials that live around the Yellowstone River. Topics include: the Exxon oil spill, recreation problems/concerns, grant money and delegation efforts, clean up and conservation efforts, and ecological concerns.

Powell, Wyatt

Title: How TV Sees You Faculty Mentor: Joy Honea Major: Sociology, Criminal Justice

Project Narrative: A study of the way narrative-driven TV dramas and comedies airing in the last year portray the most common master statuses in the U.S. By doing so, it may be possible to better understand what these shows are telling us, and what that says about the ways we should act as people and to people.

Redman, Baylie

Title: Developing Video Games to Teach Pro-Social Behaviors: A Textual Analysis of the Video Game UnderTale

Faculty Mentor: Melissa Boehm Major: Mass Communication

Project Narrative: *UnderTale* is a video game that allows a player to travel through a world of monsters by choosing to fight and kill them or to show mercy on them all. I used Pro-Social theory and Behaviorism to do a textual analysis of two of the primary characters, Undyne and Flowey, comparing their behaviors between the Pacifist and Genocide routes and noting the stark contrast between their behaviors in each playthrough that shows players the consequences of their choices. The success of *UnderTale* shows that video games can teach players positive behaviors and be enjoyable without extreme violence.

Reichenbach, Casey

Title: Color Sorter

Faculty Mentor: Andy Sullivan Major: Process Plant Technology

Project Narrative: We will be designing a high-speed color-sorting machine that is run by an industrial programmable logic controller. This machine is relevant to industrial processes that sort desirable products from undesirable products, for example, separating unripe or rotten produce from the desired produce.

Riley, Nicole

Title: Madly Flawed: A Proppian analysis of the AMC series Mad Men

Faculty Mentor: Melissa Boehm

Major: Public Relations

Project Narrative: The emotionally complex and visually stunning television program *Mad Men* focused on the world of Madison Avenue in the 1960s and 1970s. This study identifies the three most prominent and important Proppian functions of the stories portrayed through representation theory occurring over 40 times

in episodes one and thirteen of season one.

Roberts, Caleb

Title: Water Filtration

Faculty Mentor: Andy Sullivan Major: Process Plant Technology

Project Narrative: This project explains the five steps it takes to fill water at the Billings Water Plant.

Roberts, Joshua

Title: Ideas Hurt Our Feelings: A Textual Analysis

Faculty Mentor: Melissa Boehm

Major: Liberal Studies

Project Narrative: The episode "Precious Snowflake" of the series *Last Man Standing* reveals the struggle of conservative ideologies in a changing nation. Through textual analysis, we see that the show ties into the political environment of the time and gives humor and conflict resolution to a nation in political upheaval.

Robinson, Mataia

Title: The Effects of Visualization on the Accuracy of a Volleyball Serve

Faculty Mentor: Alex Shafer

Major: Health and Human Performance

Project Narrative: Visualization or imagery is a technique used by many professionals to create or recreates a skill or action without physically performing the skill (Lajcik, 2008). The purpose of this study is to test the effects of a one-week visualization training program on accuracy during a volleyball serve.

Ronan, Jacob

Title: Validation of the Five-Minute Pyramid Test for VO2max Estimation in Healthy Young Adults

Faculty Mentor: Alex Shafer

Major: Health and Human Performance

Project Narrative: The measurement of maximal oxygen uptake (VO2max) is an important determinant of an athlete's fitness. The five-minute pyramid test (5MPT) developed by Anderson et al. (2011) can be used to estimate VO2max. The purpose of this study is to validate the 5MPT in healthy young adult males and females.



Root, Caitlyn

Title: Growth of Influenza in Tissue Culture: Investigation of Parameters Affecting Final Virus Titer

Faculty Mentor: Paul Nash

Major: Biology

Project Narrative: The purpose of this research study is to better understand influenza growth within a laboratory setting. This becomes important when growing high titer virus for use in challenge studies and other procedures, where the most effective dose of virus is needed to test the proposed vaccine. In order to grow the virus, the MDCK cell line was used. We show here an analysis of some of the variables affecting growth and some comparison of alternate quantification methods.

Sailors, Sam

Title: Protecting Hearing in an Industrial Setting

Faculty Mentor: Andy Sullivan Major: Process Plant Technology

Project Narrative: Sound levels were measured in the Process Plant Technology lab with a cellular phone app. Sound energy levels were compared with OSHA limits for various equipment, and a hearing protection map

was developed.

Schwarz, Margaret

Title: Old Souls Ensemble Faculty Mentor: John Roberts Major: Music Education

Project Narrative: The group Old Souls, a new music ensemble at MSU Billings, will arrange and perform

American Soul music. Includes 4 vocalists, 4 horns, and rhythm section.

Scoles, Crystal

Title: Ethanol Fuel Production Economics

Faculty Mentor: Andy Sullivan Major: Process Plant Technology

Project Narrative: We explored the ethanol fuel production cost from Montana crops including wheat and barley. Our calculations and explorations covered, production costs such as labor, ingredients and equipment

for the small scale producer.

Segerstrom, William

Title: Hola' Jesus

Faculty Mentor: Tami Haaland Major: Communications

Project Narrative: This short story asks: Did you ever wonder what would happen if Jesus returned to Earth for

a day? Let's go on an adventure together to speculate what the celestial circus might look like.

Shanley, Tyler

Title: Color Sorter

Faculty Mentor: Andy Sullivan Major: Process Plant Technology

Project Narrative: We will be designing a high-speed color-sorting machine that is run by an industrial programmable logic controller. This machine is relevant to industrial processes that sort desirable products from undesirable products, for example, separating unripe or rotten produce from the desired produce.



Sharp, Aaron

Title: Gram-Positive Bacteria Inhibition by a Novel Small Molecule

Faculty Mentor: Kurt Toenjes

Major: Biology Medical Laboratory Science

Project Narrative: This project is part of an effort to find new molecules that have antimicrobial properties in order to combat the rise of resistance and prevent undue suffering in those afflicted. A small molecule is under investigation that displays promising antimicrobial properties in preliminary studies against *Candida* species and many pathogenic gram-positive bacteria. Research is currently focused on *S. aureus and C. difficile* with the goal of finding the mechanism of action of the small molecule by using mutant strains of *S. aureus*.

Sitton, Collin

Title: Old Souls Ensemble Faculty Mentor: John Roberts Major: Music Education

Project Narrative: The group Old Souls, a new music ensemble at MSU Billings, will arrange and perform

American Soul music. Includes 4 vocalists, 4 horns, and rhythm section.

Sitton, Collin

Title: MSUB Low Brass Ensemble Faculty Mentor: John Roberts Major: Music Education

Project Narrative: A low brass group performing 2 short pieces: Down in the River to Pray arranged by

Christopher Warren and Two Chorales by Brahms.

Sowerwine, Randal

Title: The YouTube Channel PewDiePie's Popular Uploads: A textual analysis

Faculty Mentor: Melissa Boehm

Major: Liberal Studies

Project Narrative: This research looks at the YouTube Channel called PewDiePie, which has been popular since 2010. A textual analysis was done on 11 videos, exploring PewDiePie's use of the reinforcement theory in those videos, and whether those videos portray him as racist or sexist to his audience.

Stover, Jessica

Title: Arranged Marriage and Love: Societal Fascination with Reality Relationships

Faculty Mentor: Joy Honea

Major: Sociology, Organizational Communication

Project Narrative: This research provides content analysis of television shows regarding arranged marriage. The goal was to find out why contestants sign up for the program, what drives them to this point in their life, and, overall, what this tells us about our current society and why we need/want to find love this way.

Thronson, Brandon

Title: Protecting Hearing in an Industrial Setting

Faculty Mentor: Andy Sullivan Major: Process Plant Technology

Project Narrative: Sound levels were measured in the Process Plant Technology lab with a cellular phone app. Sound energy levels were compared with OSHA limits for various equipment, and a hearing protection map was developed.



Tokar, Darcie

Title: Literary Reading

Faculty Mentor: Tami Haaland

Major: Business Administration: Management

Project Narrative: Students from CRWR 240, Introduction to Creative Writing, will share examples of their

poetry or other literary work. Questions from the audience are welcome.

Tuss, Morgan

Title: Do Schemas Help Fuel Our Memory?

Faculty Mentor: Matt McMullen

Major: Psychology

Project Narrative: Modeled after Bransford & Johnson's 1972 study testing schematic-knowledge of laundry, the purpose of our research was to identify whether knowledge of the task of pumping gas, and its subsequent schema, assisted its recall. In our blind study, two groups—those who received the title of the task and those who did not—completed a test that consisted of a timed review and timed recall. The results were then analyzed by serial and disordered recall to test participants' explicit and gist knowledge of the task.

Twiss, Krystle Dawn

Title: Social Conflict and Facebook News Comments

Faculty Mentor: Joy Honea

Major: This project is a content analysis on social conflict found in news commentary over Facebook. The

project examines the role of social media in contributing to societal divisiveness.

Ullman, Seth

Title: MSUB Low Brass Ensemble Faculty Mentor: John Roberts Major: Music Education

Project Narrative: A low brass group performing 2 short pieces: Down in the River to Pray arranged by

Christopher Warren and Two Chorales by Brahms.

Ungefug, Emily

Title: Advanced Poetry

Faculty Mentor: Tami Haaland

Major: English

Project Narrative: Students from the Poetry Workshop class will read and discuss their work.

Wade, Mike

Title: Advanced Poetry

Faculty Mentor: Tami Haaland

Major: English

Project Narrative: Students from the Poetry Workshop class will read and discuss their work.



Walters, Joseph

Title: Elongator Function in the Anterior Pituitary and its Relevance to Familial Dysautonomia

Faculty Mentor: Lynn George Major: Biology, Psychology

Project Narrative: Familial Dysautonomia (FD) is a devastating neurodegenerative disease caused by insufficient levels of Elongator, a holoenzyme complex needed for normal translation of codon-biased genes. FD patients exhibit a reduced number of autonomic neurons and suffer from a multitude of autonomic symptoms including cardiovascular instability, gastrointestinal incoordination, and respiratory dysfunction, in addition to poor growth velocity and weight gain. Here, using a mouse model, we show that knocking out Elongator specifically in the anterior pituitary causes stunted growth and upregulation of certain codon-biased genes.

Witty, Wyatt

Title: Possible Augmentation of Cross-Education via Mirror Neuron System in Elderly Population

Faculty Mentor: Alex Shafer

Major: Health and Human Performance

Project Narrative: Cross-education is the phenomenon of gaining strength in an untrained muscle group of one limb that is contralateral and homologous to a trained muscle group on the opposite limb. New evidence suggests that this effect may be augmented by the incorporation of the Mirror Neuron System by performing exercises in front of an actual mirror. The purpose of this study is to build on the little evidence that is available on this phenomenon in a population most likely to benefit from the possibility.

Young, Eric

Title: Hero or a Punk? A Man of Privilege or Oppression? The Perception and Reaction of Colin Kaepernick's

Protest: A Textual Analysis
Faculty Mentor: Melissa Boehm
Major: Mass Communication

Project Narrative: NFL quarterback Colin Kaepernick has been the subject of intense scrutiny and debate over the past two years due to his involvement in a protest against the racial oppression of minorities during the U.S. national anthem. This study applied Joseph Klapper's reinforcement theory of psychoanalytics to media coverage on Kaepernick's protest and subsequent loss of employment by using a textual analysis on selected sources.

Zeeb, Alice

Title: Breaking Bad or Making Bad: A Textual Analysis

Faculty Mentor: Melissa Boehm Major: Organizational Communication

Project Narrative: *Breaking Bad* was one of the most successful television series from 2008 to 2013 and contains amounts of physical and verbal violence. Using George Gerbner and Larry Gross's Cultivation Theory, or "Mean World Syndrome," this project analyzed three episodes for frequencies of violent acts based on specifically coded criteria.



MSU BILLINGS DEPT OF MUSIC

The MSUB Department of Music welcomes you to the 2018 MSUB Research, Creativity, and Community Involvement Conference!

- We are very excited to be hosting the Friday evening concert by renowned pianist Philip Aaberg.
- We are also excited to be contributing to this year's conference with our Jazz Concert on Thursday evening at 7:30 in Cisel Hall. The concert will highlight 3 ensembles, the Jazz Ensemble (big band format), the Jazz Combo, and the Old Souls, a new ensemble in the department this year that arranges and performs American soul music. The concert will feature a wide variety of styles including Swing, Bebop, Latin Jazz, Funk and Soul music.
- During the day on Friday there will be presentations by the MSUB Low Brass Ensemble and the Old Souls.

On behalf of the MSUB Music Faculty

Mark Fenderson, Scott Jeppesen, Doug Nagel and John Roberts

Welcome to the Conference!



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Jazz Concert

Thursday, April 19, 7:30 PM Cisel Recital Hall

Jazz Ensemble

John Roberts, Director

Saxophone	Trumpet	Trombone	Rhythm
Raegan Bunting Melissa Czarney Sarah Farris Tyus Mendoza Konnor Stiles	Tyler Honcoop Sara Hutzenbiler Monica Moss	Chris Fite Tucker Heller Collin Sitton Seth Ullman	Alex Bush Patrick LaFountain Teague McChesney Drew McDowell Shawn Rasmussen Dillon Steiger

Jazz Combo

Scott Jeppesen, Director

Sarah Farris Kourtnie Funkhouser Chris Fite Margaret Clevel	
Konnor Stiles Tyler Honcoop Haehwan Jung Drew McDowell Dillon Steiger	

Old Souls

John Roberts, Director

Saxophone	Trumpet	Trombone	Rhythm	Vocalists
Sarah Farris	Tyler Honcoop	Collin Sitton	Alex Bush	Emerald Hart
Mady Johnson			Patrick LaFountain	Malia Howell
			Teague McChesney	Brooke Moncada
			Drew McDowell	Maggie Schwartz



WELCOME

Dear Friends of the Northcutt Steele Gallery and MSUB Department of Art,

As we near the end of spring semester 2018, I am proud to celebrate the artistic accomplishments of the students of MSUB. The works selected by our juror for inclusion in this year's exhibition testify to the rich talents and diverse visions of our students working across a broad range of media.

I offer my sincere thanks to all participating artists, to my staff of student gallery assistants and student and alumni volunteers, and to the entire Department faculty and staff who make this exhibition possible.

I would also like to especially thank this year's juror, Red Lodge-based artist Maggy Rozycki Hiltner. Maggy is an accomplished, prolific contemporary artist whose work I greatly admire. It has been a pleasure to work with her and I thank her for sharing her time and her insight with our students.

Lastly, I congratulate all of the students selected for inclusion in the exhibition. And to those who were not selected, I encourage you to keep creating and to keep taking risks. Our department, our campus, and our community are immeasurably enriched by your creative energy and efforts.

Leanne Gilbertson, Ph.D. Director, Northcutt Steele Gallery

JUROR'S STATEMENT

I'm honored to jury this year's Juried Student Exhibition at the Northcutt Steele Gallery, which presents me an opportunity to express my admiration for the Department of Art at MSUB, its legacy in the artistic life of our region, and the remarkable artists it fosters.

In choosing entries I hoped to represent the variety of different ways of making that are taught at the University. As the results indicate, however, my final choices were dictated by my response to the intrinsic aesthetic and conceptual qualities of each work, rather than adhering to a quota by medium or theme.

The entries impressed me with their breadth and inventiveness, not only in physical execution and technique but in ideas and emotions conveyed.

Congratulations to the students featured and to all who took the courageous step of submitting work. It was a pleasure to review your work; and I know visitors to the exhibition will share that pleasure.

Maggy Rozycki Hiltner

ABOUT THE JUROR

Red Lodge artist Maggy Rozycki Hiltner has been an Artist-In-Residence at Yellowstone Art Museum and received a Montana Arts Council Artist's Innovation Award in 2015. Her work has been included in numerous national and international exhibitions in museums and galleries, and has been published in the US and abroad.



Kari Adams *Glorious Ruins*Manipulated digital photography. 41" x 26".

Kari AdamsVenusian Conflict
Acrylic and Resin. 23" diameter.

NFS \$150



Danielle Alden *Mantis*Metal. 48" × 30".



John Allenbaugh

still life painted sculpture
stoneware, oil paint, oil paper. 24" x 24" x 60".

\$300

\$1,000





Samantha AraveA Poor Man's Roses
Mixed-Ink, Acyrlic, Charcoal, Water Color. 36" x 24".
\$495

Emma Berry *Untitled*Mixed media on canvas. 28" x 35".

NFS

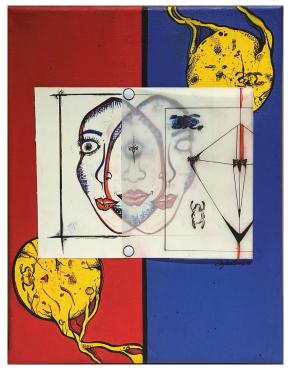


Lindsey CarrellThe Moth in the Crucible
Oil and egg tempera on canvas. 24" x 30'.



Gabrielle Coombs Yellow SoldiersAcrylic paint. 16" x 20".

\$700 \$50



Taylor EvansSplit
Mixed media & Acrylicon Canvas. 11" x 14".



Isaiah Girard Message From the DreamworldAcrylic Paint on Canvas. 16" x 20".

NFS





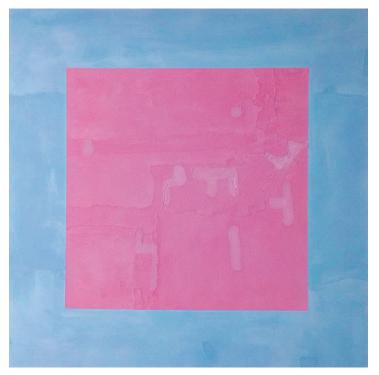
Hannah Harsha

Queen Anne's Lace
Ceramic. 11" x 5" x 1.5".

Ben Havens

The Villainess and her Legion of Nightmares Digital. $7" \times 5"$.

NFS NFS



Zachary Hinkle Contra Flocking powder and glue on canvas. $36" \times 36"$.

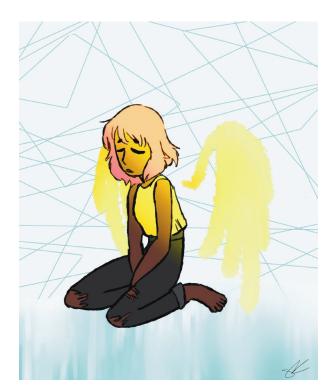


Zachary Hinkle

Plasti #2

Plasti-Dip, Rol-A-Tex, and acrylic paint on wood panel.

\$450 18" x 24".



Shayleen Klein *Pyre* Digital. 8" x 6".



Brenna LacyPoppy Wailing
Ink on Canvas. 25" x 52".

\$40 \$300

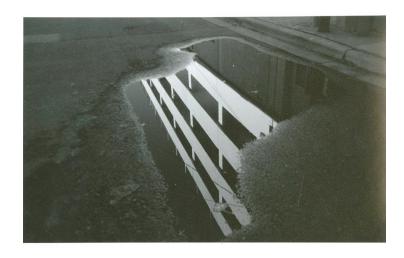


Brenna LacyAvenue
Gesso, Ink, and Watercolor on Cardboard. 25" x 34". \$200





Rebecca Lee
Overgrown
ink on paper. 131 "x 32".



Rebecca Lee Standing In A PuddleGelatin print. 12.5" × 9".



Elizabeth May Mouse DecompositionArchival Print. 31.5" x 42".

\$150 \$100



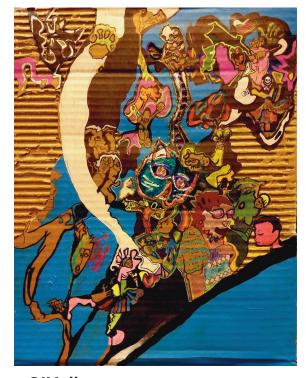
Elizabeth May Two One LinersWood, Resin, assembled objects. 8" x 8".



Jered Musso

Nerve Machine (Reasons Why I Can't Stop)

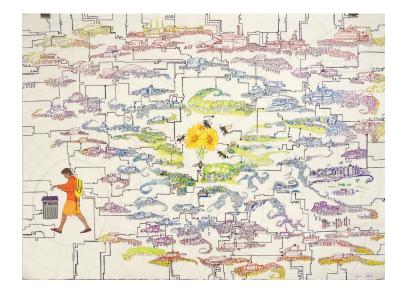
Alcohol ink and pen on yupo paper. 9" x 11".



Casey O'Malley

Cat, Flower, People

Cardboard, gel pen, watercolor pencil, sharpie marker, nail polish, fabric paint. 13" x 15.5".



Terri PortaSocial Coordination of Bees
Ink on Paper. 20" x 24".

\$300.00

\$120



Angel Shandy *Gravity*Charcoal on paper. 18" x 24".



Angel Shandy Not Just Fruit SaladOil on canvas. 18" x 24".

\$250 \$300



Angel Shandy Seven Fold page 3Watercolor and ink on paper. 11" x 17".



Breanna Shermer *Like an Anchor in the Sea*Matte Photo Paper. 20" x 16".

NFS \$125



Marsha Stewart

Eat The Rich

Acrylic/Paper on Board w/Frame. 12" x 24".



Marsha Stewart

Lovely, Ain't She?

Textiles/Paper/Found Objects. Base 8" x 8"/Doll 24"

\$350 Tall.



Marsha Stewart

Duplicity

Acrylic/Paper on Canvas. 11" x 16".



Rilie StovallParamount

Torch, soldering tool, and acrylic paint. 36" x 60".

\$200 \$500



Morgan Syring *Viserion* Chainmail. 25" x 1".



Morgan Trowbridge BondCharcoal. 18" x 24".

\$100 \$100



Special Thanks & Appreciation

Interim Chancellor Ron Larson
Facility Services
Phillip Aaberg
Kris Douglas
Shelly Ovalle

Provost Robert Hoar Leanne Gilbertson Patrick Williams Mark Fenderson Sodexo

Everyone in IT who helped with printing posters
Student Union Staff and Student Workers
Honors Student Volunteers

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Access & Excellence

