



*Eighth Annual
Morningside College*



Wednesday, April 13, 2011



*The Morningside College experience cultivates
a passion for life-long learning and a dedication
to ethical leadership and civic responsibility.*

Key Note Speaker: Megan Cifarelli



Megan Cifarelli is an Assistant Professor of Art History at Manhattanville College in Manhattanville, New York. She has a M.A. in Art History and Archaeology, M. Phil., and a Ph.D. in Art History and Archaeology from Columbia University. Cifarelli has been the director of the Manhattanville Museum Studies Program since 2006. In addition to her teaching positions, Cifarelli sits on the Exhibition Advisory Board for The Walters Art Museum in Baltimore and the Exhibition Co-Director, Curator, and Project Humanist at The Children's Museum of Manhattan in New York City. She has published and presented in the field of art history and archaeology, especially in regards to the Middle East. She is currently researching and excavating the Hansanlu site in Northwestern Iran, an Iron Age site. This research is ongoing and has yet to be published.

***Eighth Annual Morningside College
Palmer Student Research Symposium Schedule***

Wednesday, April 13, 2011

Opening Remark	7:45-8:00
<i>Dean Deeds</i>	Yockey

Panel Session I	8:00-9:00
Non-Empirical	LC102

1. 8:00-9:00 Classical Mythology and Literature: Studies in Contrast

Danielle Dahlkoetter, Jedidiah McCoy, Cameron Oakley & Samantha Hansen

Students from Classical Mythology and Literature classes share research essays: Danielle Dahlkoetter (Beauty as curse and salvation in the Cupid and Psyche myth), Jed McCoy (Principles of Ancient Greek and Hebrew religions), Cameron Oakley (Is Odysseus a hero?), and Samantha Hansen (Creation stories in Greek myths and the Old Testament).

Faculty Sponsor: Dr. Marty Knepper

Panel Session II	8:00-9:00
Non-Empirical Research	LC 103

1. 8:00-9:00 Conflicts in Latin America

Jessica Boschen, Jessica Bartak & Kalifornia Grey

Jessica Bartak will discuss Barra de Colorado in Costa Rica and the recent border dispute with Nicaragua. Jessica Boschen will present the theme of memories that cannot be forgotten from dictatorial Chile. Kalifornia Grey's will discuss the conflict within the desire to find justice for Crimes against Humanity in post-dictatorial Chile.

Note: This panel will be held in Spanish.

Faculty Sponsor: Dr. Patrick Blaine

Panel Session I

8:00-9:00

Non-Empirical Research

LC 104

1. Selected Topics in Contemporary Indian Culture

Students from HIST 222: Introduction to Asian Civilizations

Students from HIST 222: Introduction to Asian Civilizations will present their group research projects on diverse topics in Indian popular culture.

Faculty Sponsor: Dr. Greg Guelcher

Oral Session I

8:00-9:00

Non-Empirical Research

LC 105

1. 8:00-8:15 Kalokagathia and Ancient Greek Gymnasium

Taylor Smith

My presentation will explore the connection between kalokagathia and the ancient Greek gymnasium, showing that a person can't have goodness without beauty and can't be beautiful without goodness. Ancient and modern sources will be used to support this thesis.

Faculty Sponsor: Dr. Heather Reid

2. 8:15-8:30 Tragedy and its Allusion to Kalokagathia

Johan Conradie

Kalokagathia is a Greek ideal that's as old as Greek tragedy itself.

The beauty of a good tragedy motivated them to reach a harmony in their own lives, so that they too can be beautiful and good. This paper argues that tragedy is an allusion to kalokagathia on stage.

Faculty Sponsor: Dr. Heather Reid

3. 8:30-8:45 Exploring Human Tendencies to Idolize Heroic Figures throughout Time: What makes heroes heroic?

Olivia Jensen

Throughout discussion of works by Homer, Euripides, Cawalti and Cambell I will draw parallels between the ancient Greek hero and modern American Cowboy figure, arguing that the Greek ideal of

kalokagathia is the reason why human kind has held on to such protagonists through time.

Faculty Sponsor: Dr. Heather Reid

4. 8:45-9:00 The Underdog and Kalogathia

Zachary Hannel

Kalokagathia is an ancient Greek philosophy, which means “the beautiful and the good”. My thesis is that the modern conception of the underdog is the natural evolution of kalokagathia. I support this by looking at modern stories of underdogs, such as Disney’s Heracles, and have analyzed and compared them to their Greek counterparts.

Faculty Sponsor: Dr. Heather Reid

Panel Session IV

8:00-9:00

Non-Empirical Research

LC 106

1. Social tensions and tactical incidents of the American Civil War

Sara Henry, Samantha McCarville & Evan Swan

This panel will examine a variety of topics relating to the American Civil War. Mrs. Henry will present on General Grant’s expulsion of the Jews from Tennessee. Ms. McCarville will discuss religious divisions among the Campbellites. Mr. Swan will present on tactical decisions made during the battle of Mine Run.

Faculty Sponsor: Dr. Patrick Bass

Oral Session II

8:00-9:00

Empirical Research

LC 107

1. 8:00-8:15 Filthy Money Myth Busted!

Jordan Walsh, Kaylee Spotts & Hanna Mortimer

Common myth suggests money is crawling with bacteria. However, researchers found money to actually be cleaner than the average fingertip, busting this common misconception.

Faculty Sponsor: Dr. Rachel Robson

2. 8:15-8:30 Are Cell Phones Viable Vehicles for Transmission of Bacteria Causing Strep Throat?

Kara Yoerger, Selena Miller & Kendra Salter

The possibility that *S. pyogenes* might be spread via cell phones was investigated. 24, 48, and 72 hours after inoculation with bacteria, no *S. pyogenes* were found on cell phones. Surveys (n=373) indicated that cell phones are rarely used in a manner that brings phones to people's mouths.

Faculty Sponsor: Dr. Rachel Robson

3. 8:30-8:45 Competition of methicillin-susceptible *S. aureus* isolates and USA300

Michael Oetken, Josh Beutler & Mike O'Neal

Asymptomatic carriage isolates of methicillin-susceptible *Staphylococcus aureus* were grown together with the methicillin-resistant strain USA300 to determine which type of bacteria would display a growth advantage in the absence of antibiotics. MSSA strains typically outcompeted the MRSA strain, but this pattern did not hold for all isolates tested.

Faculty Sponsor: Dr. Rachel Robson

4. 8:45-9:00 Co-Colonization of *Staphylococcus* in Left and Right Nostrils

Laura Maynard & Austin Boger

Staphylococcus aureus can cause serious problems in hospitals, especially when patients go into surgery. Because antibiotics can't always be used to get rid of undesirable bacteria, it is thought that maybe other bacteria considered normal flora could be used to get rid of undesirable bacteria.

Faculty Sponsor: Dr. Rachel Robson

Panel Session V

9:10-10:10

Non-Empirical Research

LC 103

1. The Vietnam War in History & Memory

Evan Swan, Jordan Aggen & Chelsea Bumann

Abstract: Students from HIST 337: The Vietnam War class in Fall 2010 will present their research.

Faculty Sponsor: Dr. Greg Guelcher

Oral Session III

9:10-9:40

Empirical Research

LC 104

1. 9:10-9:25 Optimally Pebbling Hypercubes

Brad Penning

Optimal pebbling is a game played on mathematical graphs. When played on cubes, it was originally believed that the solution was to place pebbles antipodally (on opposite sides). We provide examples of this not being the case for cubes of dimensions eight or more.

Faculty Sponsor: Dr. Chris Spicer

2. 9:25-9:40 Effects of the Power Balance Band® on Physical Abilities Tasks and User Perceptions

Kara Nelson

The experiment evaluated the effects of wearing a Power Balance Band® (PBB) while performing physical abilities tasks. Participants performed strength, flexibility, and balance tasks while either wearing or not wearing the PBB. It was hypothesized that the PBB would not result in improved task performance.

Faculty Sponsor: Dr. Michael Calvillo

3. 9:40-9:55 Peer Responses to Low Performers: Generalizability of Attribution Theory in a College Team Sport Context

Lauren Nugent, John Bothwell, Gustav Hollnagel & Nicholas Putnam

Controllability (internal; external) and stability (high; low) were manipulated in a 2x2, between-subjects experimental design. Sixty Morningside College students provided attribution and affective, cognitive, and behavior ratings of a low performing basketball teammate. ANOVA was used as the method of data analysis. Results were discussed with respect to the generalizability of peer attribution theory.

Faculty Sponsor: Dr. Michael Calvillo

Oral Session IV

9:10-9:55

Non-Empirical Research

LC 105

1. 9:10-9:25 Kalokagathia and Gattaca

Travis Archer

Are beauty and goodness given at birth or earned through struggle?

This paper explores the link between kalokagathia (the beautiful and the good) and agon (struggle) by comparing ancient Greek ideals and the 1997 movie Gattaca. It is determined that virtue is impossible to obtain without difficulty.

Faculty Sponsor: Dr. Heather Reid

2. 9:25-9:40 Integrated Education

Ryan Johnson

Current educational practices create a disassociation between physical, intellectual, and character education which results in an inferior overall education which leaves most students lacking.

Drawing on sources of educational philosophy I argue a model that integrates the three areas to create a more effective education.

Faculty Sponsor: Dr. Heather Reid

3. 9:40-9:55 The Body Temple

Josh Creekmore

The world is full of theory on health and what it means to be healthy. I plan to discuss the connection between true health and true beauty and goodness and also how it is that one can only truly seek kalokagathia with a healthy, balanced mind and body.

Faculty Sponsor: Dr. Heather Reid

Oral Session V

9:10-10:10

Non-Empirical Research

LC 106

1. 9:10-9:25 Cell Phone Usage Effect on Memory

Lindsey Nielson

Cell phone usage can be distracting to others around by hearing only part of the conversation, also known as a halfalogue. The research compares full conversations on the phones, and half of a conversation heard to a control group of no conversation heard. The hypothesis is that full conversations are more distracting than halfalogues; however, halfalouges are also distracting.

Faculty Sponsor: Dr. Larry Sensenig

**2. 9:25-9:40 I'm Not Playing Videogames, I'm Trying to Study:
Gaming and Memory Performance**

Andrew Gerodias

The effects of video game play on short-term memory (STM) were investigated. Participants' STM was tested after three levels: no gaming, gaming as a distractor, and gaming as an aid to STM. Significant effects of gaming emerged with no game eliciting the best STM performance followed by gaming as an aid.

Faculty Sponsor: Dr. Susan Burns

**3. 9:40-9:55 Morris Water Maze: Investigation of Escape Times
Being Effected by Pre-swim & Post-swim Exposure to Platform**

Amber Richtig

The purpose of the study is to investigate whether pre or post exposure to a hidden platform has any effect on rat escape swim times in the Morris Water Maze. Two randomly assigned groups of 12 Long Evan Hooded Rats (*Rattus norvegicus*) were used in this experiment. I hypothesize escape swim times (sec.) will be shorter for the pre-exposed group than for the post-exposed group.

Faculty Sponsor: Dr. Larry Sensenig

**4. 9:55-10:10 Correlates of the Relationship Leadership Style: An
Exploratory Study**

*Josh Cain, Derrick Freese, Bryce Williamson, Donte Williams &
Cody Galvin*

A pilot study of 11 upper-class students in an Psychology course at Morningside College revealed significant correlations between a relationship-orientated leadership style and two other independent leadership variables: (1) a measure of leadership trust, and, (2) a leadership personality characteristic that measures individualism versus collectivism. This present study attempted to explore these relationships using a larger sample of undergraduate students.

Faculty Sponsor: Dr. Michael Calvillo

C&C Presentations

9:30-10:10

Part I

UPS

**1. 9:30-9:40 My Big Fat Greek-American Culture: Two Worlds
Unite through Moussaka and Wonder Bread**

Monica Blaine

I want to show the use of food in My Big Fat Greek Wedding: its relationship with ethnicity, culture and social practices. Food in MBFGW is used as an instrument of integration, allowing for the resolution of conflict between two cultures and the process of learning to adopt an individual identity inside a strong culture.

Faculty Sponsor: Dr. Jennifer Peterson

2. 9:40-9:50 How Technology Has Hurt Family Communication

Olivia Diggs

Recent advances in technology have greatly influenced how much, how easily and in what ways American families currently communicate. It has been shown by experts in the field that these changes have had negative effects on family units.

Faculty Sponsor: Dr. Brenda Mammenga

3. 9:50-10:00 One Kid, Two Kids, Maybe Three, Not Four: Decreasing American Family Sizes

Ariel Turnquist

The typical American family size has declined over the past sixty years. Factors contributing to this decrease include religion, modern technology and the economy. This presentation will address some positive consequences of this trend.

Faculty Sponsor: Dr. Brenda Mammenga

4. 10:00-10:10 A Revolution Caused by the Theory of Evolution

Jordan Staples

‘A Revolution Caused by the Theory of Evolution’ argues that Charles Darwin’s evolution theory radically impacted people inside and outside of the scientific world. His original idea survives and has become part of a constantly advancing field of research. Published literature was used as support for this paper.

Faculty Sponsor: Dr. Patrick Blaine

C&C Presentations

10:20-11:00

Part II

UPS

1. 10:20-11:30 Does Mother Really Know What’s Best?

Mariah Stauffer

When there is too much pressure from parents to perform well, or win, young athletes get burned out and quite. Pressure by parents can increase the chances of an injury in sports. Bad behavioral examples are set when parents and coaches put too much pressure on winning.

Faculty Sponsor: Dr. Jeremy Schnieder

2. 10:30-10:40 The Anatomy of an Autopsy

Hailey Hogan

Consenting to organ donations is a relatively accepted practice because people view it as helping others; conversely, consenting to an autopsy is controversial, despite autopsies having numerous benefits. While the specific reason for this discrepancy is unknown, perhaps it is because people are unaware of the benefits of autopsies and how they are performed. This presentation aims to eliminate these factors.

Faculty Sponsor: Prof. Karmen Ten Napel

3. 10:40-10:50 LEED Certification Process

Sarah Davy

The United States Green Building Council is one of the many groups assisting the population in going green. Through this process, Leadership in Energy and Environmental Design (LEED) certification has developed. The LEED process rewards sustainable infrastructure through certification and financial benefits.

Faculty Sponsor: Prof. Terri McGaffin

4. 10:50-11:00 Environmental Impacts of Hydroelectric Power

Misty Johansen

Hydroelectricity is one of the cleanest and environmentally friendliest methods for making electricity, yet it has some major disadvantages that not only generate harmful environmental effects but also diminish natural regions. The disadvantages are not worth enduring because we need to preserve nature for future generations.

Faculty Sponsor: Prof. Terri McGaffin

A. Salt Lethality Levels in *Daphnia*

Kelsey Prosser & Jordan Walsh

Road salt is used as a de-icer assisting with safe travel, road maintenance, and overall human safety; however, it may be harmful to aquatic ecosystems. Varying levels of salinity were tested to determine lethality levels of salt in *Daphnia magna*, a model organism. High salinity was found to be toxic.

Faculty Sponsor: Dr. Bill Heyborne

B. The Effects of Temperature on Respiration Rate in *Pandinus imperator*

Kristi Rohde, Amy Kessler & Melissa James

We used four scorpions (*Pandinus imperator*), one male and three females, and placed them in a respirometer to compare respiration rate under varying temperature. The data suggests temperature has an effect on respiratory rate in this species, with an increase in temperature corresponding to an increase in respiratory rate.

Faculty Sponsor: Dr. Bill Heyborne

C. Effects of Diet on *Planaria* Regeneration

Nick Haedt & Will Glienke

When severed organisms from the genus *Dugesia* have the ability to regenerate. In our experiment, we severed *Dugesia* and then recorded their regeneration rates with differing diets; two protein-based one algae-based. Our data showed that groups feeding on the protein-based diets experienced a more rapid regeneration.

Faculty Sponsor: Dr. Bill Heyborne

D. Chemical Pesticides and the Effects on Human and Animal Health

Will Glienke & Josh Gaedke

Conservationists frown upon excessive use of chemical pesticides in agriculture. We are aware of chemicals known to be toxic with long-term effects on man and wildlife. Pesticide movement describes how pesticide residues persist in the environment and how they are concentrated from lower to higher trophic levels of the food chain.

Faculty Sponsor: Dr. Bill Heyborne

Poster Session Ib

10:00-11:00

Empirical Research

Yockey

A. Influence on Memory if Music or Silence is Present

Mike McBride

This study investigated the effect of music or silence on one's memory accuracy. Participants were asked to remember words while listening to music or silence. During recall, participants recalled the words in the same environment as studying or the opposite environment. Its predicted people would test better in matching conditions.

Faculty Sponsor: Dr. Kim Christopherson

B. The Effect of Stereotype Threat on Women's Gaming Performance

Garth Hamilton & Kelsey Kallhoff

To test stereotype threat on videogame performance, participants completed the Bem Sex Role Inventory (Bem, 1981) and then were either told, prior to game play, that the game has (or has not) revealed gender differences. Results indicated women performed similarly regardless of instructions, and participants' gender ideology did not predict game play.

Faculty Sponsor: Dr. Kim Christopherson

C. Analyzing the Real Cost and Benefits of Organically Grown Food

Jessica Boschen & Kyle Eagen

We hear so much about organically grown products being relatively more expensive than non-organic products. However, this is only approaching the shelf-value in supermarkets and is ignoring any external costs, which include health and environmental factors. An investigation was conducted to analyze the real costs and benefits of organic farming.

Faculty Sponsor: Dr. Bill Heyborne

D. Methane: The Numerous Uses and Local Environmental Impact

Sam Doerr & Hongyi Bin

Methane is often implicated as a greenhouse gas. Yet, uses for it are plenty and have economic and environmental impacts. Many negatives of the greenhouse gas are noted but its positives often go unnoticed. Research into a local landfill provides evidence of both the positive and negative effect of methane.

Faculty Sponsor: Dr. Bill Heyborne

Maud Adams Research Presentations

10:00-11:15

HPER

HPER 114

A. 10:00-10:15 a.m. Recommended Protocols for the Prevention of Ventilator-Associated Pneumonia

Eileen Sorenson, Mackenzie Dorsett & Aaron Newman

Ventilator-associated pneumonia (VAP) is a complication that could potentially arise in patients who have been mechanically ventilated. Consequently, increased cost and hospital stay results from VAP. This research utilization project examines interventions that could be implemented in Mercy Medical Center's already established protocol to promote cost-effectiveness and improve health outcomes.

Faculty Sponsor: Prof. Lori Doeschcot

HPER 114

B. 10:15-10:30 a.m. When Silver is Better Than Silicone

Laci Swanson, Molly O'Neill & Carey Baczwaski

Urinary Tract Infections are common, costly, and avoidable.

This presentation covers the cost effectiveness and benefits of using silver alloy indwelling catheters vs silicone catheters in hospitals. According to the research, hospitals making the switch from silicone to silver alloy catheters had better patient outcomes.

Faculty Sponsor: Prof. Cheryl Harrington

HPER 115a

A. 10:30-10:45 a.m. Postpartum Depression: Risk Factors, Screening Tools, and Nursing Implications

Courtney Roder, Charles Gordon & Briana Dietrich

Postpartum Depression (PPD) is the most prevalent complication of pregnancy. The nurse is uniquely positioned to interact with women across the span of childbearing and identify women who are at risk for or who have PPD. Risk factors, screening tools, and nursing implications regarding PPD will be reviewed in detail.

Faculty Sponsor: Prof. Sharlene Georgesen

HPER 115a

B. 10:45-11:00 a.m. Cancer-Related Fatigue: The Sixth Vital Sign

Kayla Kopfman & Shelby Pomeranke

Everyday Cancer-Related Fatigue (CRF) impacts the quality of life for many cancer patients. This research utilization project analyzed the issues encompassing CRF and the impact on cancer patient's diagnosis, treatment, and recovery. Recommendations for implementing a standardized plan of care involving assessment and prevention strategies will be discussed.

Faculty Sponsor: Dr. Jackie Barber

HPER 115a

C. 11:00-11:15 a.m. Hyperglycemia Management in the Acute Care Setting

Jamie Vander Kooi, Lauri Nees, & Stephanie Schmidt

The purpose of this presentation is to address the issue of hyperglycemia for diabetic patients in the acute care setting. Research findings on the interventions of patient education and moderate vs. tight blood glucose control will be presented. Evidence based practice recommendations for nursing interventions will be suggested.

Faculty Sponsor: Dr. Mary Kovarna

Panel Session VI

10:20-11:20

Non-Empirical Research

LC 104

1. Selected Topics in Contemporary Indian Culture

Students from HIST 222: Introduction to Asian Civilizations

Students from HIST 222: Introduction to Asian Civilizations' will present their group research projects on diverse topics in Indian popular culture.

Faculty Sponsor: Dr. Greg Guelcher

Oral Session VI

10:20-11:20

Non-Empirical Research

LC 105

1. 10:20-10:35 Russia and the Resource Curse

Elizabeth Norton

This presentation will be discussing the nature of what is known as the resource curse, in the case of Russia. The paper will consist of research into other countries that suffer from the resource curse and the commonalities they share with the case of Russia.

Faculty Sponsor: Dr. Patrick McKinlay

3. 10:35-10:50 The Trimurti and their Consorts

Corinne Youngberg

After explaining some of the fundamentals of Hinduism, this paper will discuss the Trimurti and their consorts. I will argue that the consorts help the Trimurti to fulfill their roles and duties.

Faculty Sponsor: Dr. Jessica DeVega

4. 10:50–11:05 Emily Dickinson and the Question of Organized Religion

Kelci Teut

My paper discusses how Emily Dickinson acquired her religious beliefs by examining the historical context of her life, specifically her relationship with organized religion in her hometown of Amherst, Massachusetts. Then, I discuss how her beliefs and their acquisition are both recorded in her poetry.

Faculty Sponsor: Dr. Jen Peterson

Oral Session VII

10:20-11:20

Non-Empirical Research

LC 106

1. 10:20-10:35 Multi-generational Blended Workforce

Linda Wideman

The workforce today is made up of a multi-generational blend. It is up to today’s business managers to figure out the best way to develop and utilize the talents each generation brings to the job. This research presents characteristics and work habits of three different generations.

Faculty Sponsor: Dr. Pam Mickelson

2. 10:35-10:50 Managing Across the Generations

Brianna Mozer

The purpose of managing across the generations' research is to evaluate managing practices unique to each generation. Through literary research and personal interviews the author concludes each generation has adapted to their resources. In addition, each generation implemented characteristics that allowed them to become successful managers and manage successful organizations.

Faculty Sponsor: Dr. Pam Mickelson

3. 10:50–11:05 Generational Stereotypes: Fact or Fiction?

McKenzie Reece

McKenzie Reece Stereotypes are placed upon different generations. This project observes managers from three different generations to see if stereotypes are true. The method used was personal interviews, with additional information from academic journals. The conclusion was most managers fit the stereotypes of their generation.

Faculty Sponsor: Prof. Jeffrey Zink

4. 11:05-11:20 Managing Across Generations: Do Common Stereotypes Apply?

Charles Szitas

Managers often use stereotypes to cater to differing needs of employees across different generations. Using primary and secondary sources, I challenged the idea that stereotypes always fit. Interestingly, I found that stereotypes usually do not fit. My findings suggest that managing to individual needs outweighs applying stereotypes to the generations.

Faculty Sponsor: Prof. Jeffrey Zink

1. 10:20-10:35 Rock Stars of London: Henry Purcell and his Opera,

Dido and Aeneas

Haley Gabriel

This presentation is about composer Henry Purcell and his revolutionary opera, *Dido and Aeneas*. In it we look at his life and the opera, describing the techniques used in the opera to make revolutionary for the time. To conclude, I will perform one of the opera's famous arias.

Faculty Sponsor: Dr. Gail Dooley

2. 10:35-10:50 Iowa Choral Directors' Attitudes Toward

Competition

John Calahan

In this study, the author will attempt to catalog through the use of online surveys the attitudes of Iowa high school directors toward the enrollment of their students in choral competitions. This data will be a foundation for further research in music teaching methods.

Faculty Sponsor: Dr. Jill Wilson

3. 10:50–11:05 Procedurally Generated Terrain

Travis Archer

As gaming computers become more powerful, games are expected to be increasingly detailed. This results in increased costs and time from artists. This paper explains methods of procedural generation techniques for creating random landscapes, including algorithms, erosion algorithms, water modeling, and vegetation simulation techniques.

Faculty Sponsor: Prof. Randy Campbell

4. 11:05-11:20 Palmer Candy Company Research

Michelle Rubenking, Heidi Lieber, Korey Auten, Alexander Annan & Katherine Brannen

Research was gathered to help Palmer Candy Co. with five new products. Interviews, observations, focus groups and taste test experiments were used to help with naming and placement of the products. Eight recommendations were made based on the primary and secondary research.

Faculty Sponsor: Dr. Pam Mickelson

LUNCH BREAK 11:45-12:30

KEYNOTE SPEAKER: Dr. Megan Cifarelli –
“Taking it with you: Death and Personal Adornment at Hansulu Iran”
12:45pm in UPS of Lincoln Center

Panel Session VII

2:00-3:00

Non-Empirical Research

LC 103

1. Processes of Transformational Leadership

Emily Greenlee, Claire Gibbons, Maggie Vanderstelt, & Kevin Holland

This panel, consisting of four students from the Leadership Learning Community, will present their findings on developing transformational leadership skills based on the process of self-education. Each panelist will present his or her observations on how self-education is obtained via personal epiphanies, motivational factors, and mentoring opportunities.

Faculty Sponsor: Dr. Leslie Werden

Panel Session VIII

2:00-3:00

Non-Empirical Research

LC 104

1. Selected Topics in Contemporary Indian Culture

Students from HIST 222: Introduction to Asian Civilizations

Students from HIST 222: Introduction to Asian Civilizations will present their group research projects on diverse topics in Indian popular culture.

Faculty Sponsor: Dr. Greg Guelcher

Oral Session IX

2:00-2:45

Empirical Research

LC 107

1. 2:15-2:30 Assessing Food Insecurity in Siouxland

Jennifer Williams, Jessica Boschen, Samantha McCarville, Ashley Runge, & Daniel Whithorn

This project was aimed at collecting information about food insecurity in Siouxland and determining ways to improve the food aid system in the area. Information was collected in collaboration with the Center for Siouxland through client surveys as well as analyzing methods used by other food pantries around the country.

Faculty Sponsor: Dr. Lillian Lopez

2. 2:30-2:45 The Effects of Adolescent Choir Auditions

Jaime Parkinson

The purpose of this study is to investigate young adults' perception of themselves of a singer or non-singer and how this perception correlates to their participation in an auditioned choir in elementary, junior high, and/or high school.

Faculty Sponsor: Dr. Jill Wilson

3. 2:45-3:00 Seven Principles: Student's Perceptions of Faculty Teaching Effectiveness

William Knapp, Ambra Coon, Tyler Schleis & Jacob Chambers

In a survey, Morningside College students (N=80) reported their perceptions of full-time and adjunct faculty teaching efficacy. A Likert-type scale of teaching efficacy was developed based on the Seven Principles for Good Practice in Undergraduate Education (Chickering and Gamson, 1987). Results were reported with respect to overall efficacy and full-time versus adjunct differences.

Faculty Sponsor: Dr. Michael Calvillo

Oral Session X

2:00-3:00

Empirical Research

LC 105

1. 2:00-2:15 Managing the Generations

Kayla Stehlik, Briana Moser, & Linda Wideman

Generational differences are inevitable within today's workplace.

Baby Boomers are beginning to retire and Generation X and

Generation Y are beginning to have to fill these management

positions formerly held by them. How can conflict be avoided?

Faculty Sponsor: Dr. Pam Mickelson

2. 2:15-2:30 Ethics of Targeting Children in Advertisements

Jarit Euerle

This presentation uses professional opinions to research the ethical dilemma of targeting children in advertisements.

Faculty Sponsor: Dr. Pam Mickelson

3. 2:30-2:45 Unethical Advertising of Chewing Tobacco in Teenage Users

Steven Wimmer

I will be presenting about unethical advertising. Specifically it is unethical advertising in all types of media advertising about chewing tobacco to teenage, and underage users. Including areas of the rules and regulations of advertising tobacco, to the loopholes found by the tobacco agencies.

Faculty Sponsor: Dr. Pam Mickelson

4. 2:45-3:00 Promotion of Tobacco Products and the Government's Role

Khan Rosenberger

This research paper argues issues associated with tobacco advertising, the role of government in that industry and the level of responsibility of individuals who might use tobacco products. There is a balance that must be struck among these competing interests, and right now, the government is the controlling factor.

Faculty Sponsor: Dr. Pam Mickelson

Oral Session XI

2:00-3:00

Empirical Research

LC 106

1. 2:00-2:15 Significant Difference in Numbers of Bacteria on Paper Currency from a Small Town and a Larger City Bank

Krystal Carlson, Kathleen Arnts & Katie Matasovsky

A common concern is becoming ill from bacteria on paper currency. This study compared bacterial counts on bills from small town and big city banks. Few bacteria were found on any bills. Most bacteria from the bills were spore forming, which are of little concern in terms of causing infections.

Faculty Sponsor: Dr. Rachel Robson

2. 2:15-2:30 Relationship between Antiseptic Wipe Use and Bacteria on Shopping Cart Handles

Katie Rasmussen, Brendan McCabe & Michelle Weber

In this study, the use and effectiveness of sanitary wipes at one Midwestern grocery store was investigated. Even though the experiment showed that the antiseptic wipes are extremely effective, most of the non-wiped carts also had little-to-no bacterial colonies as well.

Faculty Sponsor: Dr. Rachel Robson

3. 2:30-2:45 Antibacterial Effects of Jack3D, a Dietary Supplement

Nate Drees & Bobby Lee

Jack3D is a popular dietary supplement intended to increase energy. In this study, Jack3D was also observed to have some antibacterial effects, stopping the growth of some Staphylococcus and Salmonella strains.

Faculty Sponsor: Dr. Rachel Robson

4. 2:45-3:00 Expression of Luciferase Gene in *Vibrio fischeri* in vitro

Lydia Bienlien

Vibrio fischeri are marine bacteria that have the ability to glow due to their luciferase gene. We attempted to develop a culture medium that would support the growth of *V. fischeri* and the expression of the luciferase gene. We did not observe any bioluminescence, although growth was present.

Faculty Sponsor: Dr. Rachel Robson

A. Social Media and the Hiring Process

*Lauren Nugent, Samantha Grella, Emily Albrecht, Ivy Borcharding,
& Javy Alvarez*

Our research is going to be focused on the legal aspects and personal opinions of potential employees and employers with the involvement of social media in the hiring process. Surveys will be distributed among college staff, college seniors, and business professionals. We want to create an awareness of the potential use of social media in the hiring process.

Faculty Sponsor: Prof. Molly Williams

B. Prime and Prejudice: A Measure of Islamophobia

Amanda Martens

This study examined the effects of priming negative (unpleasant), positive (pleasant), Christian, or neutral words on an Islamophobia scale. Sixty Morningside student participants were randomly assigned one of four different priming cognitive tasks through a PowerPoint. They were then deceived into taking the Islamophobia scale as a completely separate task.

Faculty Sponsor: Dr. Larry Sensenig

C. Presence of Guns in School

Amber Richtig & Lindsey Nielsen

The purpose of our study is to examine the viewpoints in western Iowa upon the presence of guns in the schooling environment. We wish to see if there are different viewpoints among departments. A survey was used to demonstrate the views of the professors. We hypothesize that the professors will not like guns to be present within the schooling environment.

Faculty Sponsor: Prof. Molly Williams

D. Effects of Media Pictures on a Man's Self Body Image

Karena Danner, Chad Sewick, Jessica Tjaden, & Alex Rogers

Twenty-four male participants viewed model, non-model, combination, or no photos for two or five min then completed a body-image survey to examine the effect of media on a body image. Non-significant results indicate a pattern whereby men viewing model photos reported lower body image scores.

Faculty Sponsor: Dr. Susan Burns

Poster Session IIb

2:00-3:00

Empirical Research

Yockey

A. Shrew Survey in Woodlands and Prairies in Stone State Park

Taylor Rasmussen, Casey Elledge, & Kelsey Prosser

A survey of shrews was initiated in forest and grasslands of Mt. Talbot Preserve and Stone State Park with pit fall traps. We expected to capture three species of shrews between the two sample areas. The effectiveness of this trapping method and results of the grassland/woodland comparison will be discussed.

Faculty Sponsor: Dr. Jim Stroh

B. Caffeine Content of Beverages

Stephanie Mefferd, Samantha Emerick, Lyra Christensen, & Kyle Thaden

A majority of people in the US consume caffeine, however, few realize how much they consume daily. This experiment used high-performance liquid chromatography to determine the amounts of caffeine found in a variety of beverages. Data collected was compared to the amounts listed on containers and the recommended daily maximum.

Faculty Sponsor: Dr. Seth Elwood

C. Nostrils Are Independent with Regard to S. Aureus Carriage

Johan Conradie

Hospitals assume that the nostrils are homogenous with respect to S. aureus carriage. We challenge that assumption. The nares of volunteers (N = 251) were swabbed to determine carriage and to genetic relation. Nostrils are independent with regard to S. aureus carriage.

Faculty Sponsor: Dr. Rachel Robson

D. Coming Undone: Which Factors Better Predict Risk-Taking in College Students

Kathy Gruis

Recent national survey data on American college students indicate that many participate in risky behaviors. In the present study, 91 individuals completed four surveys assessing risky decision making and three factors affecting risk taking: gender, religiosity, and social desirability. A Stepwise Multiple Regression showed sex was the most significant variable.

Faculty Sponsor: Dr. Kim Christopherson

Poster Session IIc

2:00-3:00

Empirical Research

Yockey

A. X-ray Spatial Analysis of RCW103

Jedidiah McCoy

We looked at the x-ray emissions of the supernova remnant RCW103. Our objective was to investigate the spatial asymmetry of this system. Digital analysis software from the Chandra X-ray Observatory was used. Our research gives insight into the history of this supernova remnant and the star from which it originated.

Faculty Sponsor: Dr. Andrew Plumb

B. I'm Watching You: Effect of Observer Presence on Violent Behaviors in Videogames

Danielle Dahlkoetter, Daren Koehler, Garth Hamilton, Kelsey Kallhoff, & Andrew Gerodias

To investigate the impact of being watched on aggressive behaviors in a violent videogame, males were observed for half of their 40 min gameplay. Gameplay was recorded coded for violence: toward person, objects, and overall violence. Results indicate an increase in violence toward objects when an participants game without observation.

Faculty Sponsor: Dr. Susan Burns

C. Squeezed Chip Puzzle

Stephanie Norton

Consider a row of red and blue chips arranged as follows: rbrbr...brbr. The goal is to determine the minimum number of moves necessary to get all of the red chips on the left, moving two adjacent chips at a time. We offer a solution to this problem.

Faculty Sponsor: Dr. Eric Canning

D. Construction of a Simple Microcontroller System

Michael Stern

The construction of a simple microcontroller system is a study on technology, which seeks to provide a deeper understanding of computer systems that accept user input and provide output. For this purpose I have taken an Arduino microcontroller, and used it to program a version of the classic game: Pong.

Faculty Sponsor: Dr. Andrew Plumb

A. Channelization of the Lower Missouri River, its Effects, and Some Possible Solutions

Evan Swan & Russell Sands

Most of the lower Missouri River has been modified by channelization to aid navigation and prevent flooding. This has come at a great environmental cost. Our research examines these costs and recommends that a new agency work with individual landowners to restore the river where possible.

Faculty Sponsor: Dr. Bill Heyborne

B. Immunosuppression and Working Toward Transplant Tolerance

Sydney Brisco

Organ transplants save the lives of thousands of people every year. The main problem with organ transplants is the rejection that can occur if the immune system of recipient and donor do not match. Further immunological research can lead to safer transplants.

Faculty Sponsor: Dr. Rachel Robson

C. Autism Spectrum Disorder: Efficacy of the Discrete Trial Training Method

Katie Gill

Several treatment strategies, including Discrete Trial Training, Pivotal Trial Training, and the Early Start Denver Model are available to address cognitive and behavioral Autism Spectrum Disorders (ASD). This thesis synthesizes a wide variety of literature on these strategies, and concludes that Discrete Trial Training is the most widely supported, applied, and effective treatment strategy.

Faculty Sponsor: Dr. Michael Calvillo

D. Investigation into the Relevance and Necessity of Equipoise in Clinical Research

Brittany Frisch

At present, clinical equipoise is an ethical standard for clinical research. This presentation investigates what science is, how equipoise is defined, and if it is in fact a necessary condition for clinical research, using the development of a HIV vaccine as a case study.

Faculty Sponsor: Dr. Rachel Robson

Panel Session IX

2:10-3:10

Non-Empirical Research

LC 104

1. Selected Topics in Contemporary Indian Culture

Students from HIST 222: Introduction to Asian Civilizations

Students from HIST 222: Introduction to Asian Civilizations will present their group research projects on diverse topics in Indian popular culture.

Faculty Sponsor: Dr. Greg Guelcher

Poster Session IIIa

3:00-4:00

Empirical

Yockey

A. Understanding the advancements and Difficulties in HIV Vaccine Development

Brittany Frisch

HIV has one of the highest prevalence and mortality rates of any virus. While many believe an effective HIV vaccine is not possible continued efforts into researching its structure, transmission, suppression of the immune system, genetic variability, and ability to evade the immune system continue.

Faculty Sponsor: Dr. Rachel Robson

fNon

B. Why Did You Do that? Personality and Morality in Videogames

Daren Koehler, Danielle Dahlkoetter, Garth Hamilton, Kelsey Kallhoff, & Andrew Gerodias

To investigate the role of self-reported personality characteristics and moral reasoning on participants' aggressive behavior within a violent videogame, participant completed a series of pre-gaming questionnaires and then played a violent videogame for 40 min.

Analyses indicate few personality characteristics (only self-reported anger and in-group loyalty) predicted aggressive gaming behavior.

Faculty Sponsor: Dr. Susan Burns

C. Adaptive Speed Control

Joseph Danks

An implementation of an adaptive speed control using the LEGO NXT Mindstorms. The vehicle uses a sonar sensor to calculate the relative speed of the object in front of it. It can then modify the speed to match the other object.

Faculty Sponsor: Prof. Dean Stevens

D. Simple Computer Virus

Levi Liester

I have created a primitive but effective virus that is built with Visual Basic. It plays into individual's fears by spoofing anti-virus warnings. I will be presenting on the method in which it infects the computer and safe methods of removal for not only my virus but other viruses.

Faculty Sponsor: Prof. Dean Stevens

A. Passive and Active Solar Energy in Homes

Allison Von Ehwegen, Lexie Matthey, & Sean Elliot

Solar energy has been utilized as an energy source for centuries. Passive solar energy was used historically, and active solar energy is becoming more popular. Use of passive solar energy focuses on building architecture whereas active solar energy use requires solar panels. Here we present an investigation of both types.

Faculty Sponsor: Dr. Bill Heyborne

B. Bait Preference and Population Evaluation of Small Rodents in Stone State Park

Kelsey Prosser

Over the past year, research was conducted in Stone State Park to evaluate small rodent populations as a direct correlation to the health of Iowa prairie ecosystems. Three different types of bait were used to lure the rodents, and peanut butter was found to be the most successful.

Faculty Sponsor: Dr. Jim Stroh

C. The Effects of Different Soil Types on Worm Growth

Evan Swan & Allison Smith

This experiment looked at African Earthworm growth in different natural soil types without additional organics. The worms were measured once per week and the average growth in each soil type was compared. Results suggest the sand, clay, and topsoil substrate is the most efficient for growing worms.

Faculty Sponsor: Dr. Bill Heyborne

D. Estimating Deer Density Through the Use of Camera Traps in Ravine Park

Josh Beutler & William Pfau

The purpose of this study was to use camera traps to estimate the size of the deer herd in Sioux City. Deer density from camera trapping rate was estimated from a model that required estimates of deer speed and group size. Accuracy of estimates and potential problems will be discussed.

Faculty Sponsor: Dr. Jim Stroh

Poster Session IIIc

3:00-4:00

Empirical Research

Yockey

A. Ethanol, the Fuel That Feeds Farmers

Chase Maier & Jeremiah Curry

Corn-based ethanol is an alternative energy source derived from corn. Ethanol decreases dependency on oil, carbon emissions, and creates jobs that increase overall farming economy. However, Ethanol uses fossil fuels and is a less efficient fuel. Corn-based ethanol is an example of alternative energy source growing in the Midwest.

Faculty Sponsor: Dr. Bill Heyborne

B. How Poverty and Food Supply Affects the Environment for School Aged Children

Jane Ricard, Jennifer Ranek, & Michele O'Neill

Increased poverty is linked to environmental destruction. Poverty is widespread throughout Siouxland. Consequently, we interviewed local schools, conducted online research, and utilized databases to show that although many assume we have problems with a lack of food, we contend that the real problem is inequitable distribution of available food resources.

Faculty Sponsor: Dr. Bill Heyborne

C. Wind Energy, The New Green

Mandria Moran & Stefanie Ford

Our presentation describes wind energy and its use as an alternative energy source. We weigh pros and cons, look into cost and see it on a local scale through the eyes of a wind energy “farmer.” We define the parts and uses of turbines. This green energy alternative is viable!
Faculty Sponsor: Dr. Bill Heyborne

D. Pros and Cons of Hydroelectricity

Dusty Krager & Erin Barkley

We have been exploring how dams are made as well as their effects on the surrounding environment. Some positive results from a dam may be the ability to use hydroelectricity as a clean energy source and reduced risk of floods. Some negative results from a dam include habitat alteration.
Faculty Sponsor: Dr. Bill Heyborne

Poster Session IIIId

3:00-4:00

Non-Empirical Research

Yockey

A. The Negative Effects of Media on Male Athletes

Travis Ward

In this literature review, information was gathered to discover whether or not the media has a negative impact on male athletes. Research shows that the media presents a “perfect body image” to these athletes, which in turn lowers their self-esteem while viewing the product.

Faculty Sponsor: Dr. Jack Hill

B. Hiring Based on Looksism

Karena Danner, Heather Husman, Jackie Goergen, Matt Maresh, & Josh Cain

Businesses were shown pictures of individuals with different characteristics of looksism and based their hiring decisions on those characteristics. The looksism characteristics range from tattoos and piercings to the attire the person is wearing. We predict that results will show that companies do base their hiring practices off how people look.

Faculty Sponsor: Prof. Molly Williams

C. Treating Self-Injurious Behavior: Group Counseling and Dialectal Behavior Therapy

Jessica Tjaden

I propose combining group counseling and Dialectical Behavior Therapy is the best treatment for self-injurious individuals. United, the two therapies provide a stable, non-judgmental environment facilitating a successful behavior and mental change permitting to a long life without self-injurious behavior.

Faculty Sponsor: Dr. Jack Hill

D. The Differential Effects of Divorce on Women and Men

Hannah Kessler

Divorce is more detrimental for women than for men. Divorce negatively impacts health, social status, and economic status of women. The findings of this research suggest that divorce should not be viewed as a quick solution, but rather a decision that may create many adversities throughout a woman's life.

Faculty Sponsor: Dr. Jack Hill

ART SCUPTURE: Andrea Stanislav “Earth Mirrors”

4:00-4:50- Levitt Art Gallery

5:00-Sculpture Dedication “Earth Mirrors”

Outside by Epply Circle Drive and Epply Parking Lot

Rain location: Levitt Art Gallery

A special thanks to the Palmer family for their support in students' research endeavors and to the Student Steering Committee (Eileen Sorenson, Samantha McCarville, Karena Danner, Nicole Van Heek, Kaeli Austen, Alexander Permann, Leah Nielsen, and Kelsey Kallhoff) for their hard work and dedication to make this event a success!