



# RIGOR IN SCHOLARSHIP:

**FOURTH ANNUAL  
CELEBRATION OF SCHOLARSHIP**  
Interpreting the World  
Around Us

# Schedule

**April 16, 2015**

## **General Information 1**

### **Plenary Session 4**

Rigor in Scholarship: Opinion,  
Argument, & Citizenship  
*(11 AM-12 PM)*

### **Concurrent 6**

Session I *(1:15-2:15 PM)* **7**  
Session II *(2:30-3:30 PM)* **12**  
Session III *(3:45-4:45 PM)* **18**  
Session IV *(5:00-6:00 PM)* **23**

## **Creative Works 30**

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# General Information

Lewis University is proud to sponsor the Fourth Annual Lewis University Celebration of Scholarship. Providing an opportunity for the University to showcase the scholarly and artistic work of its graduate students, undergraduate students, and faculty, this annual scholarly event is co-sponsored by the **Culture of Inquiry Advisory Committee; the University Office of Graduate Studies; the Colonel Stephen W. and Lyla Doherty Center for Aviation and Health Research; the Lowell Stahl Center for Entrepreneurship and Real Estate Studies; the History Center: Urban, Cultural and Catholic History of the Upper Midwest; the Center for Ministry and Spirituality; the University Faculty Development Committee; and the Scholars Academy.**

Brother James Gaffney, FSC, President of Lewis University, will open the Fourth Annual Celebration of Scholarship at the Plenary Session scheduled to begin in Sancta Alberta Chapel at 11 AM. The Keynote Address will be provided by Dr. Margaret M. Mitchell, Dean and Shailer Mathews Professor, The Divinity School at the University of Chicago.

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The Lewis University Celebration of Scholarship will present scholarly work in three different formats throughout the afternoon and evening.

**Concurrent Sessions** – Students and faculty are encouraged to give a 15-minute presentation on a research topic or paper they have written. Concurrent sessions will be scheduled in rooms in the Academic Building from 1-6:00 PM. Registration for presenters and information regarding the various Celebration of Scholarship events will be available throughout the day in the hall between the Academic and Science Building.

**Creative Works** – These can include any piece that has been written, published or produced in a fine arts field, including music, art, theatre, literary reading, poetry, etc. The newly renovated Oremus Fine Arts Center will provide a backdrop for creative works from 1-6:00 PM.

**Poster Sessions** – Research posters will feature the results of research projects, internships and class presentations. Registration for this event will take place in the hall between the Academic and Science Building. Posters will be displayed in the Science Center and the Mathematics and Computer Wing of the Academic Building from 12-6:00 PM with the authors present at times as designated in this program.

# LEWIS UNIVERSITY



Dear Members of the Lewis University Community:

Welcome to the Fourth Annual *Celebration of Scholarship* here at Lewis University.

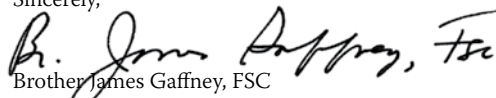
This year's theme is *Rigor in Scholarship: Interpreting the World Around Us*, focusing on research, scholarly work and creative endeavors of Lewis students and faculty. Presentations will feature work produced in 2014 and

2015, including poster, paper and various creative works, as well as performances and exhibits. Once again, many academic fields are represented, including the sciences, arts, business, humanities, education and nursing. More than 350 students are participating in this year's program. Their activities and displays are located in various academic facilities, including the Science Center, the newly renovated wing of the Academic Building, the expanded facilities for Mathematics and Computer Science Center, and the Brent and Jean Wadsworth Family Art Gallery in the Oremus Fine Arts Center.

Always highly interactive, engaging and intellectually stimulating, the *Celebration of Scholarship* will start with a Keynote Address in the Sancta Alberta Chapel by Dr. Margaret Mitchell, Dean of the Divinity School at the University of Chicago. Dr. Mitchell, a literary historian of ancient Christianity, will speak on "Rigor in Scholarship: Opinion, Argument, & Citizenship."

Much appreciation to all of those who have been involved in the considerable effort required to arrange another excellent *Celebration of Scholarship*, including leadership by Dr. Nan Yancey, Dean of Graduate Studies and Dr. Joyce Hayward, Professor, Co-Chairs of the event, in collaboration with members of their Coordinating Committee. Abundant gratitude to all who are responsible for generating exceptional scholarly works, which are meant to stimulate additional insights that lead to a better understanding of our world, its beauty and challenges, and its unexplored potential. I trust that *Rigor in Scholarship: Interpreting the World Around Us* will be truly informative, highly engaging, and provide an impetus for additional scholarly, relevant and interesting outcomes, including on topics generally identified as Lasallian in terms of their relating to our Mission and research priorities.

Sincerely,

  
Brother James Gaffney, FSC  
President



Dear Colleagues:

Once again, it is a privilege to welcome students, faculty, staff, and guests to our 4th Annual Celebration of Scholarship. Our inaugural event that began four years ago is blossoming into an event enthusiastically embraced by the Lewis University community and quickly becoming an integral

part of our culture. We again honor the excellent scholarly and creative endeavors of our undergraduate and graduate students that emerge from their work with faculty both in and outside of the classroom. We also recognize the research, scholarship, and creative works of our gifted faculty, who contribute so significantly to our student-centered Mission.

Planning for this annual event is an ongoing process, resulting from the dedicated, collaborative effort of many individuals and groups across the University. Without the enthusiastic contributions of the many faculty and staff serving on the Coordinating Committee, one of the subcommittees, as mentors for student projects, or as volunteers for the day, the continuing success of this event could not be realized.

The theme for this year's event is *Rigor in Scholarship: Interpreting the World Around Us*. Given our institutional commitment to prepare "ethically grounded graduates who are intellectually engaged, socially responsible, globally connected, and ready to make a unique contribution" (Lewis University, Strategic Plan 2012-2017), this theme provides a wonderful opportunity to spend a day appreciating the excellent work of our students and faculty as well as considering the significance of rigor in our work at Lewis University in creating our vision. Our day will begin as we welcome Dr. Margaret M. Mitchell, Dean of the Divinity School at the University of Chicago and an acclaimed

scholar, to our campus. Dr. Mitchell will present our Keynote Address, *Rigor in Scholarship: Opinion, Argument, & Citizenship* and engage students and faculty in a dynamic conversation about rigor in scholarship. Throughout the afternoon, nearly 170 presentations of scholarly work will be showcased in concurrent paper, poster, and creative works presentations, where conversations about rigor in scholarship can be continued among students and faculty from across the University and disciplines.

Another indication of the importance of rigor in scholarship at Lewis University is the success of our new Student Academic Conference Support program. During this academic year, this program has assisted 15 students across disciplines in presenting their scholarly work at professional conferences under the guidance of their faculty. A number of these presentations were showcased at last year's Celebration of Scholarship. Most of these students have undergone rigorous external review to be invited to present their work in addition to the review required at Lewis to secure funding. This initiative extends the learning well beyond the classroom and our campus by providing students the opportunity to showcase their work in a scholarly community of future peers in a professional setting.

Thank you to all who contribute in so many ways to the ongoing success and growth of this annual event. The spirit of Association was clearly evident throughout the many months of preparation. Your excitement and enthusiasm was contagious as ideas were shared between disciplines and across campus. We are all grateful for your collaboration, creativity and intense dedication to learning. Congratulations to all on this significant contribution to advancing our Mission and student learning.

Sincerely,

Dr. Stephany Schlachter  
Provost

# Plenary Session

## Welcome

**Dr. Nan Yancey**

*Dean, Office of Graduate Studies*

**Co-Chair, Celebration of Scholarship  
Coordinating Committee**

## Remarks

**Brother James Gaffney, FSC**

*President of Lewis University*

## Introduction of Speaker

**Dr. Clare Rothschild**

*Associate Professor of Theology*

**Co-Chair, Celebration of Scholarship  
Special Events**

## Keynote Address

**Rigor in Scholarship:  
Opinion, Argument, & Citizenship**

**Dr. Margaret Mitchell**

*Dean of the Divinity School,  
The University of Chicago*

**Shailer Mathews Professor of New  
Testament and Early Christian Literature**

## Audience Questions and Comments

## Closing Remarks

**Dr. Stephany Schlachter**

*Provost of Lewis University*



## **Rigor in Scholarship: Opinion, Argument, & Citizenship**

*Dr. Margaret M. Mitchell, Ph.D.*

Margaret M. Mitchell, Ph.D., is a Scripture scholar and historian of ancient Christianity. Her research and teaching span a range of topics including the Pauline letters, the poetics and politics of ancient biblical interpretation, and the intersection of text, image, and artifact in the construction of early Christian culture. Dr. Mitchell is the author of numerous books and articles, including the

following: *Paul and the Rhetoric of Reconciliation* (1991); *The Heavenly Trumpet: John Chrysostom and the Art of Pauline Interpretation* (2000); and *Paul, the Corinthians and the Birth of Christian Hermeneutics* (2010). She received a John Simon Guggenheim Fellowship (2015-2016) to translate occasional sermons by John Chrysostom. In collaboration with Court Theatre, she also received a Mellon Fellowship for creative collaboration in "The Good Book," a play about the Bible, which premiered in Chicago in March 2015. An elected member of several distinguished professional societies, including the American Academy of Arts and Sciences, Dr. Mitchell is in highest demand all over the world for lectures on a wide range of topics in the areas of religion and pedagogy.

# CONCURRENT

*(See Presenters Index on Page 69)*

Session I (1:15-2:15 PM) **7**

Session II (2:30-3:30 PM) **12**

Session III (3:45-4:45 PM) **18**

Session IV (5:00-6:00 PM) **23**





# Session I 1:15-2:15 PM

**AS-150A**

*Moderator: Dr. Lesley Page*

## Mathematics Behind Hunger

*Undergraduate Student Project in Humanities*

**Michael Smith**

*Dr. James Burke*

The United Nations set a goal to attempt to end hunger in the world. While the published statistics say that they are getting close to reaching their goal, a *New York Times* article pointed out how often the numbers change. This project takes a look at how and why the numbers have changed and determines just how close we are to ending hunger.

## Corporate Social Responsibility and Catholic Social Teaching: Irreconcilable Differences or a Marriage Made in Heaven?

*Undergraduate Student Project in Humanities*

**Donna Thompson**

*Dr. James Burke*

Though the debate over Corporate Social Responsibility [CSR] continues, many corporations boast CSR teams with noted decades-long track records. Can the 124-year Catholic social teaching tradition help a CSR do good more effectively while increasing the company's profitability?

## AS-155A

*Moderator: Dr. Elizabeth Kozak*

### Impact of Tau on CTE and Dementia

*Undergraduate Student Project in Math/Science*

**Cody Drozd**

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*Dr. Jennifer Roberts*

Tau protein plays an important role in neurons. When damaged, this can lead to Chronic Traumatic Encephalopathy. When one develops CTE, they can suffer from Dementia.

### Mechanism Elucidation of Translation Inhibiting Antibiotics

*Undergraduate Student Project in Math/Science*

**Justin Ramotowski**

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*Dr. Jennifer Roberts*

The discovery of new antibiotics is essential for modern medicine to stay ahead of emerging resistant pathogens. Blasticidin and bactobolin A are two antibiotics that show potential in stemming growth of pathogens.

### Possible Treatments of Ebola Hemorrhagic Fever

*Undergraduate Student Project in Math/Science*

**Zachary Joritz**

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*Dr. Jennifer Roberts*

Ebola hemorrhagic fever has been an important topic in recent months due to the massive outbreak in Africa in the summer of 2014. No vaccine or treatments exist, but important possibilities of ones are highlighted in this presentation.



## AS-156A

*Moderator: Eleftheria Karapas*

### Inflammatory Bowel Diseases and a Possible Correlation to Osteoporosis and Osteopenia

*Undergraduate Student Project in Math/Science*

**Ciersten Deardorf**

*Dr. Erin Zimmer*

This presentation explores the major health concerns of osteoporosis and osteopenia and the association of underlying inflammatory bowel diseases. It has been hypothesized that there are other factors also influencing the amount of low bone mineral density today in younger patients with inflammatory bowel diseases such as body mass index, corticosteroid therapy, bone metabolism (calcium, Vitamin D, phosphorus, etc.), age, gender, smoking, and duration of disease.

### The Risks and Benefits of Organ Transplantation

*Undergraduate Student Project in Math/Science*

**Georgeann Garcia**

*Dr. Erin Zimmer*

Many complications may arise after transplantation of an organ, such as organ rejection or the occurrence of cancer due to the immunosuppressant drugs that recipients must take indefinitely. There are also many changes that occur within the body after transplantation and it is important to evaluate the overall quality of life for a recipient to ensure they are able to live life to the fullest.

### Novel Treatments for Alzheimer's Disease

*Undergraduate Student Project in Math/Science*

**Stephanie Thongsri**

*Dr. Erin Zimmer*

Alzheimer's Disease is a neurodegenerative disease that affects 1 out of 10 people over the age of 65. It is the most common cause of dementia. Novel treatments like CHF5074, tetrahydrocarbazoles, human adipose-derived stem cells, and transdermal rivastigmine patches, are being made to help treat the disease.

## AS-157A

*Moderator: Dr. Mallory Havens*

### Combatting Triple Negative Breast Cancer

*Undergraduate Student Project in Math/Science*

**Mariana Gonzalez**

*Dr. Marne Bailey*

Breast cancer is among the leading causes of death for women in the United States, among which the subset, triple negative breast cancer, is most deadly. New research helps seek effective ways at targeting genetic markers specific to triple negative breast cancer.

### The Role of Telomerase Enzyme in the Development of Cancer

*Undergraduate Student Project in Math/Science*

**Araceli Gutierrez**

*Dr. James Rago*

Many studies have shown that the expression of the enzyme telomerase is increased in cancer cells in the human body. This study is an investigation into the role that telomerase enzyme plays in the progression of certain cancers, and how this enzyme could potentially be targeted chemotherapeutically as a way to treat affected patients.

### Induced Pluripotent Stem Cells in Neurodegenerative Disease Modeling

*Undergraduate Student Project in Math/Science*

**Jaimie Hughes**

*Dr. James Rago*

Scientists studying neurodegenerative disease have often encountered difficulty finding adequate cellular models on which to base their work. Induced Pluripotent Stem Cells (iPSCs) offer many researchers in the medical community the opportunity to use a renewable supply of non-embryonic-derived cells with which to perform various analyses.



## AS-158A

*Moderator: Debra Waggoner*

### Developing Mechanics Simulations in V-Python to Implement in the Classroom

*Undergraduate Student Project in Math/Science*

**Richard Wiencek**

*Dr. Joseph Kozminski*

V-Python is a programming language that is friendly for advanced mathematical calculations and simulations. In this project, it is used for the numerical analysis and simulation of non-analytic mechanical systems like modeling certain types of air resistance. Simulations include predicting the path of a basketball for someone dropping a ball off the Willis tower.

### Analysis of an LED Flasher Circuit

*Undergraduate Student Project in Math/Science*

**William Kostecka**

*Dr. Joseph Kozminski*

An LED flasher circuit using two waterfall (breakdown) transistors was examined. The effects of changing the applied voltage and of changing the value of one of the resistors in the circuit on the luminosity of the red LED and potential difference across the LED were studied.

## Session II 2:30-3:30 PM

### AS-150A

*Moderator: Dr. Michael Cherry*

## Omega-3 Fatty Acid Supplementation to Relieve Cardiovascular Complications in Type 2 Diabetes Mellitus

*Undergraduate Student Project in Math/Science*

**Margarita Velmozhina**

*Dr. Sarah Powers*

Omega-3 fatty acid supplementation is a promising addition to the current popular Type 2 diabetes mellitus treatments because it improves cardiovascular health, which is often compromised in diabetic patients. The two primary omega-3 fatty acids, eicosapentaenoic acid (EPA) and docosahexaenoic acid (DHA), are capable of reducing oxidative stress, lowering triglyceride levels, and alleviating inflammation, reducing the overall stress on the cardiovascular system.

## The Use of Helminth Therapy to Treat Inflammatory Bowel Disease

*Undergraduate Student Project in Math/Science*

**John Boldt**

*Dr. Sarah Powers*

Currently, the prevalence of Inflammatory Bowel Disease is high in modernized and developed countries where helminth infections are rare. In contrast, populations with frequent helminth infections are found in poorer countries worldwide and report few cases of Inflammatory Bowel Disease. The use of a deliberate infection with helminth worms may cause Inflammatory Bowel Disease to go into remission.

## Utilization of Photodynamic Therapy Treatment of Bronchogenic Carcinomas

*Undergraduate Student Project in Math/Science*

**Daniel Lentz**

*Dr. Sarah Powers*

Bronchogenic carcinoma is the most commonly diagnosed cancer in the world. This study examines the use of photodynamic therapy to inhibit the growth of this cancer, which has proven to be selective and efficient.



## AS-155A

*Moderator: Cathy Bohlin*

### The Effects of Sleep Deprivation on the Human Body

*Undergraduate Student Project in Math/Science*

**Cynthia Ochoa**

*Dr. Erin Zimmer*

Sleep deprivation has become a major problem in modern society. Lack of sleep is known to lead to chronic diseases, neurodegeneration, mood disorders, obesity, and diabetes. This project will explore studies showing that sleep intensifies organ specific molecular functions and its ability to reduce cellular metabolic stress in the brain and peripheral tissues.

### Prevalence of Breast Cancer in the Younger Generation

*Undergraduate Student Project in Math/Science*

**Victoria Abraham**

*Dr. William Chura*

According to the U.S. National Cancer Institute Surveillance, Epidemiology, and End Results (SEER) archive, the rate of advanced breast cancer in young women is gradually increasing. This research identifies the factors.

### The Neurotrophic Effects of Exercise on Learning at the Genetic Level

*Undergraduate Student Project in Math/Science*

**Sean Cleary**

*Dr. William Chura*

The beneficial effects of exercise on cognitive ability are widely known. Research has shown that optimal exercise can increase the genetic expression of neurotrophic factors that promote brain plasticity. The right amount of routine exercise can epigenetically promote an organism's ability to learn on the biological level.

## AS-156A

*Moderator: Dr. John Parker*

### Females and the Risk of ACL Injury

*Undergraduate Student Project in Math/Science*

**Leigh Barea**

*Dr. Jennifer Roberts*

Anterior cruciate ligament (ACL) injuries are one of the most common knee injuries for males and females. However, females have a 2-8 times greater risk for injury than their male counterparts. Researchers are studying possible risk factors such as anatomical, neuromuscular, and hormonal differences that explain the large difference between male and female ACL injuries.

### Implantable Miniature Telescope to Help End-Stage Macular Degeneration Patients

*Undergraduate Student Project in Math/Science*

**Nicholas Pietrek**

*Dr. Jennifer Roberts*

A presentation on what the implantable miniature telescope is and how it is used to help patients with end-stage macular degeneration.





## AS-157A

*Moderator: Dr. William Blackwell*

### False and Deceptive Advertising: Photoshop in Magazines

*Undergraduate Student Project in Social Science*

**Nicole Krage**

*Dr. David Anderson*

Magazines often use Photoshop to drastically alter images. This project explores students' views and opinions on unedited versus edited images, as well as when they believe the use of Photoshop to be ethical.

### The Portrayal of Females in Disney Movies

*Undergraduate Student Project in Social Science*

**Nicole Krage, Roslyn Summerville,  
Jade Osowski and Andrea Earnest**

*Dr. David Anderson*

The portrayal of female characters in Disney movies has evolved over the years. The project focuses on various physical and personality characteristics of female Disney characters, cross-referenced with the movie's release year and a character's representation as "good" or "evil."

### Awareness vs. Accuracy: The Depiction of Autism Spectrum Disorders in the Media

*Undergraduate Student Project in Humanities*

**Alexis Brown**

*Dr. William Blackwell*

This presentation discusses Autism Spectrum Disorder (ASD) as it is represented in the media. After examining several stereotypical behaviors and characteristics that have been portrayed in media regarding individuals with ASD, information will be presented regarding the time period, inaccuracies, and shortcomings in five specific film and television examples. Based on the evaluation and analysis of these examples, there is evidence that misrepresentations of ASD in the media have declined over time.

## AS-158A

*Moderator: Dr. Jackie White*

### A Closer Look at “To the Virgins, to Make Much of Time”

*Undergraduate Student Project in Humanities*

**Hayley Rife**

*Dr. Dawn Walts*

This paper analyzes Robert Herrick’s “To the Virgins, to Make Much of Time.” It provides students who struggle with poetry a simple way to analyze the text and find the true meaning and significance of the poem.

### Collaboration and the Creative Process as a Stance Against Acts of Violence

*Undergraduate Student Project in Humanities*

**Symone McCoy, Sabrina Parr, Michael Cotter, Brianna Harris and Keanu Taylor**

*Dr. Simone Muench*

These creative works were based on a bouts-rimés (“rhymed ends”) sonnet exercise, in which we had to utilize the same end-rhyme words to create unique and captivating poems. The specific words chosen connoted themes of brutality and by working collaboratively we hoped to tackle the concept of violence through creativity.



## AS-134A

*Moderator: Jeannette Pifer*

### Constantine's Basilicas: History and "Faith-based Learning"

*Faculty Scholar Project in Humanities*

**Dennis H. Cremin**

Drawing on the speaker's research as a Lewis University Faculty Scholar, this presentation investigates how teaching and research enliven the study of 4th century Christian Basilicas. The preliminary work centers on a qualitative approach that involves a literature review. Students in an Ancient World course have been involved in this research, which has exposed them to historical interpretation. This project grew out of a "place-based" learning approach, but also raises questions about a "faith-based" topic.

### The Geography of Settlement and Race Relations Among Black and White Farm Owners in Georgia, Missouri and Arkansas

*Faculty Scholar Project in Humanities*

**Mark Schultz**

In this presentation, a comparison of African American farm owners in Georgia and Arkansas will be presented. On closer examination, the political unity of the South masks sub-regional differences. After the Civil War, African Americans in Middle Georgia found that their only pathways to landownership passed through private white farm owners. As a result, they were frequently scattered among white farm owners, and even within the restrictions of Jim Crow culture, frequently developed intimate relationships with them. In contrast, African Americans in Arkansas were able to buy land directly from the federal government or from impersonal intermediaries like railroads or lumber companies. As a result, they settled in all-black communities with few contacts with white farmers.

## Session III 3:45-4:45 PM

### AS-150A

*Moderator: Jane Trainor*

#### The Use of miRNA as an Alternative to Chemotherapy

*Undergraduate Student Project in Math/Science*

**Leigh Smith**

*Dr. Sarah Powers*

The molecules miRNAs are used to control gene expression by targeting and degrading mRNA before translation. Cancer is characterized by abnormal gene expression with some overexpressed genes leading to increased cell proliferation. As an alternative to chemotherapy, miRNA could be used to suppress these types of genes, such as cyclin D3, which has been reported in human cancers.

#### The Role of Metformin in Cancer Treatment

*Undergraduate Student Project in Math/Science*

**Joseph Sanavaitis**

*Dr. Sarah Powers*

Metformin, a low cost anti-diabetic drug, has exhibited a positive correlation with the treatment of cancer. It is believed that Metformin may be used to increase apoptosis of transformed cells, while also decreasing proliferation and increasing cell specificity of common cancer treatment therapies. The use of Metformin along with cancer treatment could be groundbreaking in that it has the potential to improve results at a more affordable price.



## AS-155A

*Moderator: Dr. Lynn Tovar*

### Predicting Government Systems

*Undergraduate Student Project in Social Science*

**Andres Mendez**

*Dr. Steven P. Nawara*

With the revival of democratic government in Europe during the late 19th and early 20th centuries, many scholars have provided various explanations for this socio-political phenomenon. As people in different nations around the world struggle for a more representative form of government, it is important to understand the factors that foster democratization. The degree of economic freedom, more specifically freedom of property, in a nation will determine the perpetuation of the current, or the adoption of a new, system of government.

### U.S. Foreign Policy: Knowledge and Opinions of Lewis Students

*Undergraduate Student Project in Social Science*

**Jake Garringer, M'Aggie Huggins,  
Ian Miller, Cody Owens, Eric Schmitz  
and Grant Marunde**

*Dr. Yann Kerevel*

An examination of the knowledge and opinions that undergraduate Lewis students have regarding U.S. foreign policy.

### How to Eliminate the Gender Gap in Political and Business Sectors

*Undergraduate Student Project in Social Science*

**Alyssa Harms**

*Dr. Yann Kerevel*

This presentation includes a solution to the gender gap in the political and business sectors of the United States. The presentation will demonstrate ways and reasons for the implementation of quotas. Moreover, the findings are based on a comparative study between the countries of Germany, India, and the United States.

## AS-156A

*Moderator: Dr. Frank Rose*

### Education a World Away

*Undergraduate Student Project in Education*

**Jenny Incekara, Haley Pyrkowski,  
Emily Wagner, Caitlyn Rodighiero,  
Cori Costello, Kimberly Voltaire and  
Kaite Maki**

*Dr. Rebecca J. Pruitt*

Young children with enormous potential who have recently immigrated to the U.S. can struggle to succeed in the American educational system. While there are many documented factors that are known to hinder the success of these students, the purpose of this qualitative study was to learn about these factors from the perspective of the families themselves. Using participant observation and interviews, stories were gathered from individual families and then analyzed together to uncover themes, which included language barriers preventing access to the full academic program, cultural misunderstandings leading to animosity between families and schools, struggles between acculturation and assimilation leading to lowered self-esteem, and low teacher expectations leading to decreased academic performance.

### Immigrant Culture and Community Collaboration

*Graduate Student Project in Education*

**Juanita Samms, Danielle Barzditis,  
Shannon O'Malley, Ashley Pickens  
and Paige Santa Maria**

*Dr. Rebecca J. Pruitt*

The struggles faced by immigrants related to assimilation and acculturation processes have been well documented. The purpose of this study was to learn about these issues from the personal stories of individual families. Using participant observation and interviews, stories were gathered from individual families and then analyzed together to uncover themes which created a picture of how these families interact with their communities in ways that maintain their home culture, while strengthening relationships within the larger community.

### Bilingual in the Suburbs?... ¡A Que No!

*Graduate Student Project in Education*

**McKenna Lulic**

*Dr. Lauren Hoffman*

This study is an inquiry into the systemic minoritization of the bilingual students within a large school district in Illinois. The student voice reveals the transformative possibilities of a cosmopolitan perspective valuing linguistic and cultural diversity.



## AS-157A

*Moderator: Linda Arnold*

### Costuming Little Brother

*Undergraduate Student Project in Performing Arts*

**Jordin Richards**

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*Celeste Mackey and Jo Slowik*

This presentation examines the many steps in costuming a performance for the Philip Lynch Theatre.

### Concerted Accomplishment: An Exploration of Teaching and Learning Styles Through Children's Dance Classes

*Undergraduate Student Project in Social Science*

**Eva Gonzalez**

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*Dr. Tennille Allen and Dr. Valerie Hill*

This is a qualitative study of teaching styles, using participant observation in a children's dance class. The students' reactions, behaviors, and demonstrations of movement are observed to note how dance students show newly learned concepts and abilities.

## AS-158A

*Moderator: Dr. Mary Woods*

### The Virtual System Builder: An Artificial Intelligence Agent for Recommending System Configurations

*Undergraduate Student Project in Math/Science*

**Robert Dudasik**

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*Dr. Piotr Szczurek*

Building a computer is a way to save money and to ensure that getting a computer that satisfies individual needs. There are many constraints to designing a custom computer like components' compatibility and the builder's budget, which are difficult to satisfy for the novice builder. To address this problem, an artificial intelligence agent program was built which will recommend a list of compatible parts that maximize the performance of the system given the user's specified demands.

### The Use of Machine Learning Algorithms for Finding Role-Specific Strategies in the Game of Bang!

*Undergraduate Student Project in Math/Science*

**Drew Flowers**

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*Dr. Piotr Szczurek*

This work uses machine learning methods for finding the best strategies in the card game Bang!, a multi-player game of imperfect information with multiple roles. The proposed method first builds a model for estimating the role of each player, and then attempts to find the best strategy for the given roles. The performance of the method through simulations is then evaluated.





# Session IV 5-6 PM

## AS-150A

*Moderator: Robert Bergman*

### How Street Performers Earn Your Entertainment Dollar

*Undergraduate Student Project in Business*

**Lauryn Amerio, Amanda Buenrostro, Jakob Gregorich, Joseph Pagel and Sylwia Pikul**

*Robert Bergman and Dr. Ray Klump*

This project performed a marketing analysis of the strategies employed by street performers in Las Vegas to raise funds. After gathering data through direct observation, the various approaches street performers used were identified and their success measured.

### The Marketing of Street Begging

*Undergraduate Student Project in Business*

**Holli Kirsch, Carolina Pacheco, Cristina Pacheco, Catelyn Radtke, Lauren Stitz and Kellie Yonkers**

*Robert Bergman and Dr. Ray Klump*

Street beggars employ a variety of marketing strategies to generate donations. This project identifies the various techniques street beggars employ, gauges their success, and describes similarities with the approaches used by professional marketers.

### Change Management Facilitation Model

*Undergraduate Student Project in Business*

**Joseph Blockson, Brandon Bolling, Ryan Fox, Meghan Hurley, Matthew Jemilo and Daniel Musilek**

*Dr. Ralph Miller*

This presentation maintains the successful facilitation of individual, team, and organizational change is dependent upon understanding and applying the key elements, forces, and stages of change.

## AS-155A

*Moderator: Elizabeth Sturm*

### Using a Token Economy System in Elementary Classrooms to Manage Appropriate Behavior

*Graduate Student Project in Education*

**Adrienne Bicek**

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*Dr. Seung Kim*

The study addresses how rewarding tokens affects the absence of three target behaviors and whether a token economy system is effective for managing classroom behavior at the elementary level.

### Parental Voice and Involvement in Education: Dialogue, Public Engagement, and Equity

*Graduate Student Project in Education*

**Karen Barnes**

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*Dr. Lauren Hoffman*

This presentation addresses the issue of parental involvement in schools and the silencing of parental voice, especially those marginalized by race, class, and culture. Of particular interest is the role and interaction of parents who have children in special education. This inquiry proposes that a more informed understanding of the concepts of public engagement offer great potential for disrupting the inequity of silencing parental voice.

### Looking Beyond the Licensure in Teacher Preparation Programs: Planning School-Based Experiences That Aim at Reducing Teacher Burnout

*Faculty Project in Education*

**Dr. Mitra Fallahi and Dr. Pam Jessee**

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This manuscript reviews causes of teacher burnout. Strategies for the development of school-based activities during pre-service teacher preparation programs that target teacher burnout are suggested.



## AS-156A

*Moderator: Dr. Christopher Palmi*

### Does Exposure to Violent Video Games/Violent Media Lead to Criminal Behavior?

*Graduate Student Project in Math/Science*

**Erica Aranda**

*Dr. Hefang Lin*

The aim of this presentation is to develop a greater understanding of the relationship between violent video games and media and criminal behavior, an arguably long-term manifestation of increased aggression.

### If Terrorists Are Made

*Graduate Student Project in Social Science*

**Jared Ganley**

*Dr. Natalia Tapia*

This presentation contains a historical survey of how inter-class manipulation plays a more significant role in radicalization than traditional narratives of conflict acknowledge.

### Analytics-Based Novel Cancer Diagnosis Techniques

*Faculty Project in Business*

**Dr. Ibrahim Mescioglu**

Business analytics professionals have implemented successful solutions for complex big data problems including management of healthcare data. This study explains the findings of a novel data mining technique developed for better prediction of cancer patients who are likely to experience post-treatment symptomatic pneumonitis.

## AS-157A

*Moderator: Linda Elsik*

### Psychotherapy and Eating Disorders: Analyzing the Effects of Interpersonal Therapy with Teenage Girls

*Graduate Student Project in Social Science*

**Matthew Caston, Jr., Sarah Abbas, Nicole Carpenter and Bernice Anderson**

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*Martha Jarmuz*

Students will discuss the effectiveness of Interpersonal Therapy as a treatment for adolescent girls (from ages 12-17) suffering from severe eating disorders.

### One Size Does (Not) Fit All

*Graduate Student Project in Social Science*

**Megan Marcello, Jaclyn Conrad, Stephanie Pruefer, Abby Nelson and Elizabeth Villalobos**

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*Kimberly Duris*

Ethical code dictates that counselors should not practice outside of their theoretical orientation. However, research has shown that one theory does not fit all clients.

### Theoretical Approaches in Counseling for HIV Positive Adults

*Faculty Project in Social Science*

**Martha Jarmuz**

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This project investigates the effectiveness and outcomes of four theoretical approaches utilized in mental health counseling for individuals infected with HIV.



## AS-158A

*Moderator: Richard Clish*

### Critical Pedagogy in the Classroom

*Graduate Student Project in Education*

**Amy Kelly**

*Dr. Kip Kline*

Critical pedagogical ideologies can contribute to the creation of democratic educational environments, which promote social justice and change. This paper outlines the dominant principles of Critical Pedagogy and why they are important for educators to understand, including ways in which teachers can use these ideals in their classrooms.

### A New Post-Postmodern Pedagogy?

*Graduate Student Project in Education*

**Michael Bulfin**

*Dr. Kip Kline*

Critical pedagogy teaches students methods of resistance to forces causing inequality and injustice through revolutionary transformation within our institutions, but this study asks, “What if critical pedagogy is a modernist pedagogy unsuitable for a post-postmodern condition?”

### The Imperative of Trust: Trust in Students as a Foundational Teacher Value

*Graduate Student Project in Education*

**Jonathan Sallée**

*Dr. Kip Kline*

Social control has conflated and confused the role of educator trust for students. Through textual analysis and theoretical investigation, this work restores the status of trust as foundational to education, and renounces the use of inauthentic trust as a means of surreptitious social control.

**AS-134A***Moderator: TBA*

## Vernacular Cosmopolitanism of Rudyard Kipling and V.S. Naipaul

*Faculty Scholar Project in Humanities***Pramod Mishra**

The aim of this paper is to investigate the implications of language use in V.S. Naipaul and Rudyard Kipling in light of the emerging trend in literary studies to examine the local in the global and the global in the local, the vernacular in the cosmopolitan and the cosmopolitan in the vernacular. Scholars have accused both writers of looking at colonized peoples with condescending imperial eyes. Through examining the language and sensibility of their earlier works, this paper explores how close these writers were to the idiom of the poor and the helpless about whom they wrote and whose language they used in their works. The challenge is offered to reexamine these widely reviled writers' work from a fresh perspective to get to the heart of how meaning and message in literature emerges as a result not only of a writer's explicit political pronouncements and surface portrayals but use of language grounded in people's fractured lives in a colonial and postcolonial period.

## Coming to VOICES: Building a Student-driven Movement Against Sexual Assault

*Faculty Scholar Project in Humanities***Dr. Tracey Nicholls**

This presentation will offer an overview and analysis of the process through which VOICES (Vision-Oriented Intervention for Campus Equity and Safety), an educational initiative linking student safety and responsibility in social situations to Lewis mission values, developed from a student project to a recognized student organization. This development is relevant to LaSallian scholarship because VOICES invites students to commit themselves to being empowered participants in a broad-based social movement endorsing norms of respect, ethical sexuality, and intervention into social situations to preserve the safety and well-being of others; the culture of bystander intervention it fosters is, in essence, one way of practicing citizen engagement. Since its emergence in April 2013, the group has focused on bystander intervention training to motivate a more proactive campus culture. This presentation's particular emphasis will be on the package of curricular and extra-curricular events and teaching activities the group has developed, and the knowledge and best practices we hope to share with other universities organized around similar values-based cultures.



## Where Are All the Teachers of Color?: Examining Trends in Recruitment and Retention of Teachers of Color

*Faculty Scholar Project in Education*

**Dr. Jung Kim**

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In the next several years, children of color will outnumber white students in American schools. However, the number of teachers of color has been declining while research increasingly suggests positive outcomes for students with diverse teachers. What are schools and institutions doing to try to address these lagging numbers? This presentation will look at what the research suggests colleges of education, like that at Lewis, can do to increase and retain teachers of color in the field.

# CREATIVE WORKS

*(See Presenters Index on Page 69)*

Art Exhibits (1-6 PM) **31**

Performances/Reading (2-4 PM) **33**





# Exhibits 1-6 PM

## Nurses' Shared Prayers

*Faculty Project in Nursing*

**Dr. Kathleen Blanchfield,  
Melanie Obispo-Young, Sandra Razka  
and Nanci Peek**

Creating a prayer and sharing it is a powerful means of connecting with God and others. Prayer gives words to expressions of gratitude, praise, need, desires, emotions, and hoped-for visions.

## Solar Energy Sculptures

*Undergraduate Student Project in Visual Arts*

**Devynn Cerda, Michelle Hutchison,  
Lauren Kill, Nicole Nepote,  
Nicolas Perrino, Briana Reidy, and  
Kristen Silvey**

*Leslie Colonna and Dr. John Parker*

This project's aim and goal is to create a set of sculptural models that are designed to function as outdoor solar collectors and indoor radiators.

## #NoFilter

*Undergraduate Student Project in Visual Arts*

**Elizabeth Lopez**

*Mark Swain*

This is a self-portrait created using oil paint for the purpose of illustrating the importance of confidence, inner beauty, and an attempt to send the message that filters and makeup are not needed for one to show his or her beauty.

## Homeless Man

*Undergraduate Student Project in Visual Arts*

**Larissa Barnat**

*Mark Swain*

Walking around downtown I was looking for people to photograph. I came across a homeless man and he said, "I'll sell you chips for a dollar." This moment in time stayed in my memory as I was looking for resources to paint, so I decided to turn the photo into a painting.

## Rusty Rightover

*Undergraduate Student Project in Visual Arts*

**Nikki Nellen**

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*Mark Swain*

Rusty Righter started off as just a plain piece of masonite with a white base on it. I was given a bunch of free paint from Rustoleum and had no idea what I was going to do with it. Inspired, I began just pouring the paint on the masonite leaving some of the paint cans on the masonite to help guide the paint. I also made sure not to shake or mix the paint in the can because I wanted the effect that is created from the settling of the paint material, how when you poured it the clear glaze came out first and then the paint. The clear glaze also helped guide the paint throughout the masonite. Once the paint was tacky, I took my water bottle and started throwing water at certain spots to help spread the paint. I was planning on letting the paint dry and was going to put a lot more detail in it but by the time the paint dried I enjoyed the way it looked and left it alone!

## Process of Waves

*Undergraduate Student Project in Visual Arts*

**Brittany Bishop**

---

*Mark Swain*

Made out of an old speaker, this piece has five surfaces of mental and musical imagery. It stands about 3 1/2 feet tall, and plays with the idea of the similarity between waves of sound and those of the brain. It was created with mixed media including acrylic paint, spray paint, colored pencils, and chicken wire.

## Shadow 2

*Undergraduate Student Project in Visual Arts*

**Catherine Kelly**

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*Mark Swain*

Shadow 2 is created from ebony pencil on crescent board. To prepare for the drawing I took a photo of myself as my primary resource. When conceptualizing this drawing I envisioned the figure emerging from the dark background. By using a singular light source, I depicted the figure reaching out toward the viewer.



# Performance 2-4 PM

## There's No Such Thing as Literacy

*Undergraduate Student Project in Education*

**Christopher Hueg, Stephanie Hernandez  
and Kelly Langert**

*Dr. Sheila Kennedy*

This session features three teacher-candidates reading/performing their literacy narratives—each of which is distinct, as distinct as each student is from the other, suggesting, indeed demonstrating, that the term “literacy” is a misnomer. There are only literacies—plural—intimately bound to each individual and individual experience and context, importantly reminding teachers, that each student experiences “literacy” and curriculum and pedagogy and instruction in truly distinct and lasting ways.

## The Use of Creative Writing Prompts as a Generative Device to Unearth Imaginative Intelligence

*Undergraduate Student Project in Humanities*

**Symone McCoy and Sabrina Parr**

*Dr. Simone Muench*

These fictional works were based on two creative writing prompts and they convey the differences concerning realist fiction versus fabulist fiction works.

## John Milton's *Paradise Lost*: How Milton Portrays Sinister Satan as an Epic Hero

*Undergraduate Student Project in Humanities*

**Brianna Harris**

*Dr. Dawn Walts*

This paper presentation analyzes how John Milton transforms the common Satan character in his epic poem *Paradise Lost* into a character that is sympathetic as well as ambitious. Through Milton's use of language and description in the poem, he also shows Satan's heroic qualities as a leader.

## The Creative Act as an Antidote to Destruction

*Undergraduate Student Project in Performing Arts*

**Bianca Apato, Grant Mazan, Rachel Steele and Bridget Kay**

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*Dr. Simone Muench*

The poems in this panel seek to illustrate violence in today's society through conversations with Native American poetry. This panel uses the creative act of call-and-response poetry as a social justice platform, to enlighten readers, asking them to witness the impact of violence on society, instead of engaging in cultural blindness.

## There is No 'I' in Silence

*Undergraduate Student Project in Humanities*

**Rachel Steele**

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*Dr. Simone Muench*

"There is No 'I' in Silence" displays the discovery of an unfaithful relationship and the tension it leaves in its wake. The intention was to identify that women are not the only victims of cheating in a relationship. Men and women alike are capable of committing infidelities, thus their behavior should be viewed equally.

## Scene of the Crime

*Undergraduate Student Project in Social Science*

**Allison Pringle, Ashtyn Kachiroubas and Sheri Vileek**

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*Stephen L. Sherwin*

Three teams of students will present various crime scenes, demonstrate crime scene investigative methods, and ask the audience to participate in solving the crime.

## The Cento Poetic Form as Collage and Collaboration

*Undergraduate Student Project in Humanities*

**Dominique Dusek, Brittany Bishop, Kelly Lyons, Melissa Gura, and David Deschepper**

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*Dr. Simone Muench*

The poems on this panel use the 4th century poetic form, the cento, to speak to issues of witness, family, and loss. The cento is a collage form that highlights the ways in which poets are always in conversation with their poetic ancestors.



# Notes

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# POSTERS

*(See Presenters Index on Page 69)*

Session A (2:30-3:30 PM) **37**

Session B (3:45-4:45 PM) **46**

Session C (5-6 PM) **56**



# Session A

## 2:30-3:30 PM

### 1 The Truth on Ebola

*Undergraduate Student Project in Math/Science*

**Abigail Mircu**

*Dr. James Rago*

This past fall, “Ebola” was a word heard by every American who watched the nighttime news, listened to a radio talk show, or opened the Sunday morning newspaper. The purpose of this project is to share the concrete facts on this devastating disease which has affected so many people worldwide.

### 7 Bring in Some Literacy with a Little Math History!

*Undergraduate Student Project in Education*

**Jaclyn Kenyon and Nicole Ware**

*Dr. Christopher Palmi*

The focus of this study is on finding the benefits of bringing in historical concepts into an average math classroom. The aim is to find techniques to use in mathematical practices.

### 10 Characterization of Silicon Solar Cell

*Undergraduate Student Project in Math/Science*

**David Santefort, Arielle Floyd, Heather Ray and Lucas Kilmer**

*Dr. Joseph F. Kozminski*

Solar cells, or photovoltaic cells, are used to produce electricity from the sun’s light energy. Current vs. voltage curves, or IV curves, are generated for a silicon solar cell to compare the maximum power and solar cell efficiency under various conditions. These include varying the incident light intensity, incident angle, and incident wavelength (color).

## **13** Healthy People 2020: Maternal/Infant Initiatives

*Undergraduate Student Project in Nursing*

**Ann Favia**

*Linda Arnold*

This project explores four health promotion initiatives that are enhancing the health and wellness of mothers and infants in the U.S.. These initiatives have been recognized by Healthy People 2020.

## **16** Four Pics, One Word?: Vocabulary Games and Activities to Enhance Academic Language Usage

*Undergraduate Student Project in Education*

**Justina Doll, Anthony Martinez,  
Dylan Hudgins, Christopher Blogg,  
Urtan Rrahmani and Tiffany Albers-Lopez**

*Dr. Lauren Rentfro*

The teaching and assessment of academic language is a major component of the new content standards and teacher performance evaluation. This study describes the development and testing of a variety of instructional strategies for teaching and reinforcing the proper usage of academic language.

## **19** It's Easy Being Green

*Undergraduate Student Project in Math/Science*

**Kirsten Rothenbucher,  
Tommy Cornes, Michael McAuliffe,  
Tim Fitzgibbons, Chris Carter,  
Colin Jecha, Kristen Dykema,  
Kristin Lodygowski, Jeremy Hutton,  
Kyle Main, Joseph McDermott and  
Sarah Papiez**

*Dr. Jerry Kavouras*

Green roofs on campus can make use of the wasted, energy-absorbing space that resides there now. The purpose of this study was to identify campus rooftops that can be improved.

## **22** Feasibility of an Organics Futures Market

*Undergraduate Student Project in Business*

**Marzell Richardson**

*Dr. Frank Rose*

This feasibility study is to determine if a futures market based on organics is viable.





## **25** Social Studies: The Students' Perspective

*Undergraduate Student Project in Education*

**Anthony LaRocca**

*Dr. Christopher Palmi*

This study includes an investigation into how current students view the importance of social studies. What do they like, what do they dislike, what should be changed? It is based on recent research and comprehensive surveys of Lewis students.

## **28** The Effects of Exercise as an Early Intervention for Parkinson's Disease

*Undergraduate Student Project in Math/Science*

**Kimberly Zaleski**

*Dr. William Chura*

This presentation is a literature review that discusses exercise as an intervention for patients who have Parkinson's disease.

## **31** Mexican Immigrants in the U.S.: Policy Recommendations

*Undergraduate Student Project in Humanities*

**Brandy Bailey**

*Dr. Nancy Workman and Dr. Jennifer Buntin*

As Mexican immigrants continue to migrate to the U.S. due to the current position in globalization, it is vital that immigration policy reform occurs, reflecting upon the causes and consequences of previous, ineffective policies and posing new policies that acknowledge the benefits of immigration, facilitate efficient, dignified immigration, and overall, reflect a pro-immigration attitude.

## **34** What Are You Really Learning? How the Media Affects Students' Knowledge on Autism

*Undergraduate Student Project in Education*

**Allison Sansone**

*Dr. William Blackwell*

This study presents results from a survey of the differences between high school and college students' knowledge of autism from portrayals in the media. Does the "average student" really know what autism is and how to correctly identify a "stereotypical" portrayal from a more "authentic" portrayal?

## **37** Politics of Incarceration

*Undergraduate Student Project in Social Science*

**David DeSchepper**

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*Dr. Yann Kerevel*

This study focuses on how Red State and Blue State politics affect the rate of incarceration in the United States per state.

## **40** The Effects of Parental Incarceration on Student Behavior and Academic Performance

*Undergraduate Student Project in Education*

**Lindsey Jones and Tanya Burcenski**

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*Dr. Christopher Palmi*

This presentation focuses on the effects of parental incarceration on a child's behavior and academic performance. Based on extensive research conducted through research databases and academic journals, the presenters have examined the effects that parental incarceration has on children, as well as methods or teaching strategies that will assist educators when working with these students.

## **43** Premature Birth: Acute and Chronic Results

*Undergraduate Student Project in Nursing*

**Ashley Killian**

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*Anne McShane*

Premature birth is a continued concern in the United States. The resultant morbidity was the primary emphasis of this project. A literature review of how the nurse can positively impact long-term outcomes through quality Neonatal Intensive Care Unit (NICU) care was conducted.

## **46** English Language Learners in the English Classroom

*Undergraduate Student Project in Education*

**Kelly Langert**

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*Dr. Christopher Palmi*

With increasing numbers of ELL students in elementary and secondary education, differentiation of instruction and assessment is essential. The presentation examines the progression of ELL students in English classes and how teachers can accommodate these students.



## **49** Micro-RNAs and its Role in Cancer

*Undergraduate Student Project in Math/Science*

**Eyas Mousa**

*Dr. Erin Zimmer*

This presentation aims to discuss the mechanisms of miRNA expression and dysregulation, and the correlation between miRNA dysregulation and cancer.

## **52** The Ghost of Hamlet, “To Be or Not To Be, the Devil?”

*Undergraduate Student Project in Humanities*

**Yolanda Pena**

*Dr. Dawn Walts*

This poster presentation is based on a research paper.

## **55** Anthropogenic Fingerprint in Global Warming

*Undergraduate Student Project in Math/Science*

**Theodore Karamanski**

*Dr. William Chura*

This project presents the empirical evidence that human greenhouse gas emissions are indeed the cause of global warming, as documented in the scientific literature.

## **58** The Effects of Graphic Novels on Reading Comprehension of Exceptional Students

*Undergraduate Student Project in Education*

**Katy Papineau**

*Dr. Christopher Palmi*

This study regards information and research pertaining to teaching ELL and hearing-impaired students with the aid of graphic novels.

## **61** Campus Trees: Growing Green

*Undergraduate Student Project in Math/Science*

**Samantha Bluemer, Zachary Sherman, Justin Ramotowski and Kaitlyn Curtis**

*Dr. Jerry Kavouras*

In an effort to raise awareness of the importance of campus trees, an evaluation of trees was done to determine their ecological and monetary value.

## **64** Respiratory Syncytial Virus

*Undergraduate Student Project in Nursing*

**Caitlyn Greminger**

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*Dr. James Rago*

Respiratory Syncytial Virus (RSV) is a common virus that can cause serious respiratory infections in neonates. This project investigates the virus itself, its method of transmission, the clinical features of the disease, and the treatment options available to patients with RSV infections.

## **67** Adaptive Game Boards: Meeting the Needs of Unique Learners

*Undergraduate Student Project in Education*

**Kasey Stelmaszek**

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*Elizabeth Sturm*

This research focuses on a researching and developing a low tech assistive game board that will meet the needs of students with fine motor difficulties and/or sensory needs. It investigates what adaptations will successfully accommodate these students. This game board will help students enhance their learning and interact with others.

## **70** Mastermind and Variations

*Undergraduate Student Project in Math/Science*

**Michael Smith**

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*Dr. Amanda Harsy*

This project looks at the mathematics behind the code-breaking game Mastermind and also some variations of the game.

## **73** Social Rule Cards: Assisting in Communication

*Undergraduate Student Project in Education*

**Kalina Matt**

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*Elizabeth Sturm*

This project shows research that supports the use of social rule cards and provides examples for teachers to use to prompt communication for students with autism in the classroom.



## **76** System for Information Security Education and Real-Time Awareness (SISERTA)

*Undergraduate Student Project in Math/Science*

**Steven Day**

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*Dr. Ray Klump*

This project developed a training and visualization platform that can help future cyber security professionals prepare to meet the challenges facing cyber security operators and to understand more readily the vulnerabilities and threats confronting their systems. The real-time visualization tool provides current operators a unique visual perspective into the cyber health of their systems using color-coding and contouring.

## **79** Graphic Organizers: Effecting Improvement Among Students with Speech and Language Disorders

*Undergraduate Student Project in Education*

**Jessica Ruiz and Caitlin Kosteck**

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*Elizabeth Sturm*

This is an exploration of graphic organizers as an assistive technology tool within education. Graphic organizers have shown to be an effective assistive technology tool for students with language impairments. When using graphic organizers students recall information better, improve their reading comprehension, and increase their process writing and thinking skills.

## **82** Age-related Macular Degeneration Due to Accumulation of Lipofuscin in Retinal Pigment Epithelium

*Undergraduate Student Project in Math/Science*

**Lukas Jakubonis**

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*Dr. Marne Bailey*

Age-related macular degeneration is the main cause of deterioration and loss of vision in the elderly. One theory regarding the cause of retinal damage is the accumulation of lipofuscin, an insoluble aggregate that collects in the lysosomes of the retinal pigment epithelium over a lifetime. Research centers on developing treatment options that may promote the ability to degrade, expel, or prevent the formation of lipofuscin.

## **85** Underlying Factors of Motivations to Read

*Undergraduate Student Project in Education*

**Kelsey O'Brien**

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*Dr. Christopher Palmi*

The research conducted focuses on the home and school environments of students and their various introductions to books and other readings. The aim is to use this information to construct methods that would turn their motivations to read into positive ones.

## **88** Dark Box Project

*Undergraduate Student Project in Math/Science*

**Zachary Arcara and Anthony Smithwick**

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*Dr. Ryan Hooper*

The aim of this project was to construct a box that was completely light proof so that no light was getting inside the box. Tests were done throughout the construction to prove that the box seals out all light.

## **91** What's the Line?

*Undergraduate Student Project in Nursing*

**Marikate McCann,  
Corinna Szczeblewski-Auten,  
Matthew Kulhanek, Jessica Jones,  
Ariel Miller, Amanda Horvatin,  
Alex Dewitt and Jessica Lisak**

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*Karen Covington and Katherine McDannel*

In this project, a group of Lewis University nursing students collaborated with the staff of a large metropolitan Chicago medical center to institute a change in procedure related to central venous catheters. An evidence-based practice booklet was developed for the policy and procedures of each type of central line. With this booklet, the goal is to provide better care quality and patient safety.



## **94** Get “Fired Up” About Field Trips: Accessibility Needs at the Aurora Regional Fire Museum

*Undergraduate Student Project in Education*

**Theresa Werbiansky, Kaitlyn Thompson, Kaelyn Williams, Sara Mazan, Jocelyn Dowjotas and Zainab Aladin**

*Elizabeth Sturm*

This work of service learning attempts to make the Aurora Regional Fire Museum more accessible for students who have physical, emotional, and intellectual disabilities as well as English Language Learners. This poster will demonstrate applications to enrich the experience of all field trip attendees at the museum.

## **97** Teaching About Ableism Through Literature

*Undergraduate Student Project in Education*

**Kelly Cisco and Michael Jaeger**

*Dr. Mary Fisher*

University professors and teacher candidates explored ableist frames and stereotypes found in children’s/young adult literature.

## **100** Extraction-Induced Endocarditis

*Undergraduate Student Project in Math/Science*

**Mutsem Daineh**

*Dr. James Rago*

Many bacteria that commonly inhabit the human oral cavity are capable of causing diseases such as endocarditis, if introduced into the bloodstream in high enough numbers. The following study is an investigation into the pathogenesis of extraction-induced endocarditis, and the current state of treatment options that exist.

## **103** Use of Futures Markets to Forecast Future Equity Index Values

*Undergraduate Student Project in Business*

**Alex Hallahan and Kelly Bowler**

*Dr. Frank S. Rose*

The aim of this research is to determine if U.S. equity index futures markets provide a satisfactory forecast of future cash market equity index values.

## Session B 3:45-4:45 PM

### 2 XX vs. XY

*Undergraduate Student Project in Education*

**Alyssa Malzone, Maggie Ciezobka,  
Colleen Wereldsma and  
Leanna Pitsoulakis**

*Dr. Dorene Huvaere*

This project highlights the gender inequalities within STEM (science, technology, engineering, and math) higher education classrooms. The project aimed to determine whether or not Lewis University matched the national averages of women represented in STEM.

### 5 Yoga for Chronic Pain

*Undergraduate Student Project in Nursing*

**Brooke Jessen**

*Sandra Razka*

Complementary and alternative therapies for chronic cancer pain patients is becoming increasingly popular in conjunction with pharmacological management. The study of yoga for pain control is one method of complementary therapy. The research was directed toward yoga as a specific form of therapy to increase patient outcomes and improve chronic pain management.

### 8 Preventing Mutations in the P53 Gene Can Help Prevent Cancer

*Undergraduate Student Project in Math/Science*

**Taha Ghouleh**

*Dr. William Chura*

Research has shown that mutations can alter the normal function of the P53 gene. This research investigates implications of P53 gene mutation on cancer.





## **11** Academic, Sexual, & Social Pressures of Adolescent Boys and Girls

*Undergraduate Student Project in Education*

**Hayley Rife, Urtan Rrahmani, Ashley Olsen and Brianna Harris**

*Dr. Dorene Huvaere*

This study examines the types of pressures adolescents face and how those pressures differ between males and females. By conducting this research, the aim is to determine what boys and girls, from twelve to twenty years of age, experience regarding sexual pressures, relationship issues, and the stress of growing responsibility.

## **14** The Past, Present and Future Outlook of Engineering the Perfect Influenza Vaccine

*Undergraduate Student Project in Math/Science*

**Fiona Costello**

*Dr. Erin Zimmer*

Beginning with the detrimental effects that the Spanish Influenza had on the world population in 1918, up until the more recent deadly influenza outbreaks world-wide, the need for a more efficient vaccine is evident. Discovering a vaccine that will allow people to receive a vaccination once every 5 to 10 years followed by a booster shot thereafter, which provides protection against a wider range of influenza strains, is the ultimate goal of the scientific community.

## **17** When Worlds Collide - A Look into How RTI is Blurring Together General and Special Education

*Undergraduate Student Project in Education*

**Mary Fisher**

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*Dr. Mary Fisher*

This research project focuses on Response to Intervention, what it is, and how pre-service teachers feel about applying this intervention program in their future general education classrooms.

## **20** Immense Price Volatility in the Crude Oil Derivatives Market – Do Speculators Get In or Get Out?

*Undergraduate Student Project in Business*

**Michal Pawlowski**

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*Dr. Frank Rose*

This presentation is an extensive analysis of the link between crude oil price volatility and investor participation in the derivatives market.

## **23** Improving Oil Well Extraction Efficiency with the Use of Microorganisms

*Undergraduate Student Project in Math/Science*

**Kaitlyn Curtis**

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*Dr. Marne Bailey*

Microbial enhanced oil recovery (MEOR) is a microbial technique used to gain additional oil from oil wells. MEOR may provide a temporary solution to sustain the use of oil as a resource until a large scale switch is made to use other energy sources.

## **26** Fired Up for Field Trips

*Undergraduate Student Project in Education*

**Brianna Boseo, Georgia Lolis, Samuel Han, Kristin Schoenle and Beata Papierz**

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*Elizabeth Sturm*

In this research, surveys were conducted to identify field trip and curriculum needs and challenges for the Aurora school districts.



## **29** The Interaction of Particles with an Alcubierre Warp Bubble

*Undergraduate Student Project in Math/Science*

**Sean Lillis**

*Dr. Ryan Hooper*

This project utilizes the powerful functions available in MAPLE to model the interactions of particles with the Alcubierre warp bubble.

## **32** Recruiting at a Nonprofit with High Turnover

*Undergraduate Student Project in Humanities*

**Ivette Quinteros**

*Dr. John Greenwood*

To create and maintain successful not for profit organizations in communities with a large minority population, organizations must seek talent and skills that could most benefit the audience receiving its services. With restrictions like low pay and minimal resources, not for profits face many challenges that could affect their success. With effective retention and recruitment strategies, not for profits can find both suitable and dedicated employees who can make their services flourish for communities in need.

## **35** Talking History: Collecting and Exploring Fire Fighting

*Undergraduate Student Project in Education*

**Tabitha Makey and Sonia Gutierrez**

*Elizabeth Sturm*

This project explores the history of firefighters from the 1970s through today by conducting interviews of retired firefighters in order to meet a variety of needs for the Aurora Fire Museum.

## **38** Terraforming Mars Using Extremophilic Microorganisms

*Undergraduate Student Project in Math/Science*

**Donald Volkman**

*Dr. Marne Bailey*

As a potential solution to resource depletion, and overpopulation of the planet, scientists look to Mars as a potential terraformation solution. Using radioactive resistant bacteria, lichens, and other extremophiles, scientists may be able to create an Earth-like atmosphere on Mars. This review will summarize current theories, and how this process will be performed.

## **41** Decision-making Policy Guidelines Regarding Plagiarism

*Faculty Project in Nursing*

**Dr. Stacie Elder, Dr. Kathleen Fitzgerald, Dr. Suling Li, Dr. Janice Smith, and Dr. Gwen Svoboda**

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Plagiarism is a serious issue in institutions of higher learning in the United States. While there are university and program policies on plagiarism, the interpretations of the policies vary greatly among individual faculty. A faculty task force developed an operational definition of plagiarism, distinguishing three levels of plagiarism with examples and consequences for each level, based on an extensive literature review, examination of policies and practices of other universities, and utilizing the current standards of the CONHP and the publication manual of the American Psychological Association.

## **44** Aurora Fire Museum Creative Resource List

*Undergraduate Student Project in Education*

**Jayna McHugh and Greg Arata**

---

*Elizabeth Sturm*

Using a meta-analysis chart format, this project created a list of supplemental reading materials pertaining to fire safety and the development of fire safety procedures. This resource contains a list of books and their educational source and analysis information to be used in tandem with a visit to the Aurora Regional Fire Museum.

## **47** Characterization of Alumina Boehmite Sol Gel Using Fourier Transform Infrared Spectroscopy

*Undergraduate Student Project in Math/Science*

**John Hodul and Zach Struzik**

---

*Dr. John Parker*

This study describes how boehmite (monohydroxy aluminum oxide, AlOOH) when placed under acidic or basic conditions has the ability to form a sol gel matrix which can be characterized via Fourier Transform Infrared Spectroscopy and other methods.



## **50** Technology's Role in Adolescent Literacy Development and Teacher Education

*Undergraduate Student Project in Education*

**Dylan Hudgins**

*Dr. Christopher Palmi*

Lately, the issues of poor adolescent literacy and how to better prepare students for future demands have been at the foreground of discussion among educators. This poster presentation will cross-examine the results of an interview with a current high school student about technology literacy to a survey given to college students about the same. Inferences will be made about how well their high schools have prepared them and how to bolster student literacy in the future.

## **53** Prescription Polysulfated Glycosaminoglycan vs. Over-the-Counter Glucosamine and Chondroitin Supplements in the Treatment of Arthritis

*Undergraduate Student Project in Math/Science*

**Kristen Czech**

*Dr. James Rago*

This project compares and contrasts over-the-counter glucosamine/chondroitin supplements, and injectable polysulfated glycosaminoglycan supplements in terms of their ability to treat the signs and symptoms of arthritis in dogs.

## **56** Determining the Success of Weather Derivatives

*Undergraduate Student Project in Business*

**Melissa McCabe**

*Dr. Frank Rose*

This project regards academic research on the utility and success rates of weather derivatives in Europe, Canada, Australia, and America.

## **59** Heating up the Classroom: Providing References for Fire Safety Instruction

*Undergraduate Student Project in Education*

**Alexis Brown, Mia Caponi,  
Paige Podgorny and Alyssa Van Gampler**

---

*Elizabeth Sturm*

Elementary teachers who want to incorporate fire safety into their curriculum are in need of valid and reliable resources. In order to solve this issue, reputable resource websites will be found and evaluated for teacher reference.

## **62** Deforestation and its Effect on the Average Global Temperature

*Undergraduate Student Project in Math/Science*

**Brittany Czartoryski**

---

*Dr. Erin Zimmer*

Deforestation is by far the biggest problem that is causing an increase in global warming. As a result of changes in land cover, biodiversity properties change and patterns such as temperature and the water cycle are affected. This project will explore models such as Weather Research and Forecasting Model, Vertically Integrated Moisture Flux Convergence (VIMFC), General Circulation Model (GCM) and Characteristic Length Scale (CLS) to examine how patterns of the hydrolic cycle are changing.

## **65** Exploring Video Games in the Context of Visual Literacy

*Undergraduate Student Project in Education*

**Marquis Butler**

---

*Dr. Christopher Palmi*

This presentation explored ways that video games can be used as a type of visual literacy in the classroom.



## **68** The Regulation of Prostate Cancer Through Polyunsaturated Fatty Acid Supplementation

*Undergraduate Student Project in Math/Science*

**Nicholas Pitsoulakis**

---

*Dr. Marne Bailey*

Prostate cancer is one of the leading causes of cancer death among the elderly male population. Polyunsaturated fatty acid (PUFA) supplementation has been clinically shown to play a role in the regulation of these cancerous cells.

## **71** Orientalism Through the Ages

*Undergraduate Student Project in Education*

**Christopher Hueg, Bianca Apato, Theresa Marten and Delia Ercoli**

---

*Dr. Nancy Workman*

This project focuses on literary theory and its influence on Orientalism. Through the project, presenters researched different mediums and scholars of the theory and how it applies to literature.

## **77** Providing for Students Without a Stable Home

*Undergraduate Student Project in Education*

**Alyssa Van Gampler**

---

*Dr. Christopher Palmi*

It is important for future educators to be well informed about homeless students in their classrooms. Research was conducted to provide insight on how future educators can prepare for a homeless student.

## **80** Identification and Characterization of the Antibiotic Susceptibility of Bacterial Isolates Taken from Cell Phones

*Undergraduate Student Project in Math/Science*

**Penelope Strid, Elizabeth Harden Justin Ramotowski, Jessica Kaluzny and Haleigh Saari**

---

*Dr. Marne Bailey and Jeannette Pifer*

This study identifies to the species level and characterizes the antibiotic susceptibility patterns of several bacterial isolates acquired from different cell phones.

## **83** Use of Evidence-Based Practice

*Faculty Project in Nursing*

**Dr. Kathleen Fitzgerald, Anne McShane and Dr. Jean Lytle**

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The purpose of this study was to identify whether an educational intervention for clinical faculty on the use of Evidence-Based Practice (EBP) teaching strategies would result in a perceived increased use of EBP by undergraduate nursing students in the clinical practice setting.

## **86** Identification and Characterization of the Antibiotic Susceptibility of Bacterial Isolates Taken from Cell Phones

*Undergraduate Student Project in Math/Science*

**Nada Elsayed, Justin Ramotowski, Brianna Hopp and Haleigh Saari**

---

*Dr. Marne Bailey and Jeannette Pifer*

This study identifies to the species level and characterizes the antibiotic susceptibility patterns of several bacterial isolates acquired from different cell phones.

## **89** How Ableism is Viewed in Post-Secondary Education

*Undergraduate Student Project in Education*

**Jackie Harmon and Aubrey Miller**

---

*Jennifer Buss*

This presentation focuses on research conducted to investigate the views and knowledge of post-secondary students on the topic of Ableism.





## **92** Sleep-Wake Cycle and the Pathogenesis of Alzheimer's Disease

*Undergraduate Student Project in Math/Science*

**Glenn Chanitthikul**

*Dr. Erin Zimmer*

Evidence shows a higher frequency of sleep disorders and disrupted circadian rhythms in individuals with Alzheimer's disease. Studies suggest that inadequate sleep and reduced sleep quality may influence the pathogenesis of the disease. Current research observes sleep quality and its effect on genotype and brain protein deposition related to Alzheimer's disease progression.

## **95** Impact of Study Sessions for First Semester Nursing Students

*Faculty Project in Nursing*

**Donna Martin**

In an effort to enhance the success of first semester nursing students (Sophomore II), study sessions were offered to provide these students with additional tools and resources to enhance their success in the nursing program at Lewis University.

## **98** Reactivation of Islets of Langerhans in Patients with Type I Diabetes Mellitus

*Undergraduate Student Project in Math/Science*

**Patrick Lilly**

*Dr. James Rago*

Diabetes Mellitus (Type I) is a disease characterized by the inability of the pancreas to secrete enough insulin to meet metabolic demand. This is a comparison of various novel treatment strategies being used to help patients suffering from this disease.

## **101** Kangaroo Care for Pre-term and Low Birth Weight Infants

*Undergraduate Student Project in Math/Science*

**Guadalupe Meraz**

*Dr. Erin Zimmer*

This work describes the impacts that kangaroo care has had in clinical settings on the overall health of pre-term and low birth weight infants. Research includes history, benefits, and implementations of this method.

# Session C 5-6 PM

## **3** The Problem with Pronouns: Understanding Transgenderism and Other Gender Queer Concepts

*Graduate Student Project in Social Science*

**Caitlin Slattery**

*Dr. Nancy Workman and Dr. Jackie White*

This project will attempt to familiarize the general public with basic information on transgenderism and gender queer concepts, including accepted terminology and practices, in the hopes of developing a greater awareness and better acceptance of this demographic.

## **6** Strengthening LGBT Curriculum in Education

*Graduate Student Project in Education*

**Andrew Magis**

*Dr. Christopher Palmi*

This proposal aims to better incorporate LGBT issues into the social studies curriculum, especially when discussing civil rights. The goal is to better communicate with all students the history of the LGBT community and the prevalence of lesbian, gay, bisexual and transgender figures in American and World History. The type of creative research employed is interviewing members of their Gay-Straight Alliances at four high schools in the Chicagoland area.



## 9 Implications and Interventions for Transgender Children and Adolescents in School Settings

*Graduate Student Project in Social Science*

**Donna Lordi**

*Lisa Brown*

Cultural awareness regarding transgender individuals and their needs is increasing in popular society. Despite this, many people in this population still face persecution and inequality—particularly in school. This presentation is a review of interventions for counselors and educators to make use of in a school setting to reduce abuse and persecution for these students by increasing awareness and providing a safe environment.

## 12 Caring: The Foundation and Defining Factor of Nursing

*Graduate Student Project in Nursing*

**Angeline Brooker**

*Dr. Janice Smith*

This presentation offers an in-depth analysis of the concept of caring in nursing, in relation to the caring theory of Jean Watson. In a world which is integrating more technological aspects for patient care and higher acuties constitute a greater number of patients' health statuses, nurses may lose sight of the value a true "caring" encounter can produce. The purpose of this analysis is to explore ways to identify and understand caring in nursing and offer implications for practice. This presentation also demonstrates ways to recognize opportunities to apply Watson's caring theory in improving everyday nurse-patient encounters.

## 15 Blurred Lines

*Graduate Student Project in Social Science*

**Rebecca Liebermann, Jennifer Lagowski, Michelle Mosca and Kathy Hettinger**

*Kimberly Duris*

This presentation provides case studies and ethical decision making-models to introduce possible "blurred lines" when faced with ethical dilemmas while working with adolescents. Issues will be viewed through the ACA Code of Ethics.

## **18** Gender-Related Differences in Moral Development

*Graduate Student Project in Education*

**Krystyn Misheck**

*Dr. Dorene Huvaere*

The focus of this investigation is to review past literature to address the ongoing dispute over gender differences in moral development, taking into consideration the functioning of social-cognitive systems.

## **21** Potential Ethical Risks in Counseling Transgender Clients

*Graduate Student Project in Social Science*

**Stephanie Herrera, Lorena Perez and Sinar Steele**

*Kimberly Duris*

This study identifies issues and ethical concerns, reviews the therapeutic process and finalizing the client decision for sex change, the correlation between counseling transgender clients, and the ACA Code of Ethics.

## **24** The Perpetuation of Gender Constructs in ‘A Midsummer Night’s Dream’

*Undergraduate Student Project in Humanities*

**Kelly Lyons**

*Dr. Jennifer Consilio*

This poster presentation analyzes gender constructs in Shakespeare’s “A Midsummer Night’s Dream.” It uses scholar Louis Montrose’s work and the literary theory of new historicism to establish the connection of gender constructs between the text and the culture of the Elizabethan time period. It also uses current references to show how the text continues to perpetuate traditional gender construction even in modern society, and explain why this is problematic.



## **27** Potential Disruptions to the Therapeutic Counseling Alliance: An Examination of Gender, Religious, and Cultural Influences

*Graduate Student Project in Social Science*

**Dipa Patel, Katrina Adkins, Donna Lordi and Wendy Spikings**

*Kimberly Duris*

There are many potential disruptions in forming a strong therapeutic alliance in a psychotherapeutic relationship between client and clinician. This research is an exploration of some common factors of which practitioners should remain aware in their work.

## **30** Evidence and Ethics in Prescribing Medical Marijuana

*Graduate Student Project in Nursing*

**Sheila McGreal**

*Dr. Kathleen Blanchfield and Dr. Suling Li*

This white paper addressed the evolving evidence and ethical considerations associated with prescribing medical marijuana. APRNs need to be at the forefront of providing accurate and current therapy options to patients and are uniquely positioned to influence healthcare policy. This poster presentation provides an overview of the evolving evidence on the use of medical marijuana in practice, and the ethical and legal issues associated with this prescriptive therapy.

## **33** Cultural Awareness in Ethical Decision Making

*Graduate Student Project in Social Science*

**Yaa Afriyie, Jennifer Driscoll and JeTaun Jones**

*Dr. John Jurowicz*

This project addresses the importance of cultural awareness and diversity training in ethical decision making for counselors in training.

## **36** A White Paper: Is Consent Truly Informed in Clinical Research with Human Subjects?

*Graduate Student Project in Nursing*

**Maureen McCormick**

---

*Dr. Kathleen Blanchfield and Dr. Suling Li*

This white paper addresses the ethical challenges in obtaining informed consent of human research subjects and makes recommendations for enhancement of, and research on, the consenting process.

## **39** Human Factors Analysis of Aircraft Inadvertent Slide Deployments

*Graduate Student Project in Math/Science*

**Nicholas Kazanjian and Sudhir Surakanti**

---

*Dr. Stanley Harriman and Dr. Randal DeMik*

Researchers examined how human factors issues affect accidental and inadvertent non-emergency slide deployments in an airline environment. Inadvertent non-emergency slide deployments can have a substantial financial impact to an airline's operating cost.

## **42** Assisting Couples in Therapy with Emotionally-Focused Therapy

*Graduate Student Project in Social Science*

**Shawn Gerhardt, Nicole Deischer and Kiara Meeks**

---

*Lisa Brown*

This presentation is an overview and explanation of Emotionally-Focused Therapy and its effectiveness in couples counseling.

## **45** Gestalt Therapy in Adolescents

*Graduate Student Project in Humanities*

**Kirsten Knight, Stephanie Mckenzie, Robin Cook, Salam Al-Salem and Patrick Perry**

---

*Dr. Katherine Helm*

There is a lack of research on how Gestalt theories can be effective with the adolescent population. The research that has been conducted in this area has shown Gestalt theories to be successful. It is hypothesized that this theory is useful because it is present-oriented and typical adolescent development involves self discovery.



## **48** Peer Mentoring

*Graduate Student Project in Nursing*

**Darlene Trendl, Toya Johnson,  
Karen Uribe and Lisete Martinez**

---

*Melanie Obispo-Young and  
Dr. Gwen Svoboda*

The purpose of this project is to examine the concepts related to mentoring and to develop and implement a mentoring program for undergraduate nursing students.

## **51** To Tell or Not to Tell, That is the Question

*Graduate Student Project in Social Science*

**Azra Husain and Brandy Garland**

---

*Kimberly Duris*

Confidentiality for minors in a counseling setting is an area that presents many ethical challenges. Self-harm is considered to be one of those areas of uncertainty for counselors. This research will discuss the pros and cons of disclosing the self-harming behaviors of minors to their guardians.

## **54** Illustrating Comprehension: Incorporating Graphic Novels into the English/ Language Arts Curriculum

*Graduate Student Project in Education*

**Christopher Hueg and Caitlin Slattery**

---

*Dr. Christopher Palmi*

This presentation focuses on graphic novel inclusion in the classroom. The presenters will outline the function and components of graphic novels, explain the benefits of utilizing this “new” text form in the classroom, and provide resources and activities for educators.

## **57** An Examination into the Ethicality of Illinois’ Firearm Owner Identification (FOID) Card Mental Health Reporting

*Graduate Student Project in Social Science*

**Katie Cornyn and Jessica Johnson**

---

*Kimberly Duris*

The purpose of this presentation is to examine the new Firearm Owner Identification Card (FOID) Mental Health Reporting law that took effect in 2013. Specific to this presentation, it addresses the ethicality of the new mandated reporting system.

## **60** Treating Hypertension in the Frail Elderly

*Graduate Student Project in Nursing*

**Patricia Braida**

---

*Dr. Daisy Sherry*

After a preliminary review, it was determined that there is little evidence that guides treatment of the frail elderly over the age of 80 who have hypertension. This population is especially vulnerable to falls secondary to the hypotensive effects of their blood pressure medications. Recommendations for further study will be explored in the poster.

## **63** Proactive Coping Strategies Involved in Ethical Decision Making

*Graduate Student Project in Social Science*

**Stephanie Magdic, Vincent McAuliffe and Patricia Martinez**

---

*Dr. John Jurowicz*

Making ethical decisions involves inherent factors such as ambiguities and mistakes. In the mental health profession, it is important to consider these factors when working through an ethical decision. Unlike many popular decision making models, Primary Risk Management considers these factors and incorporates a preventative step that can be added to these ethical models, which involves foreseeing and examining potential ethical dilemmas before they occur, and allowing counselors to foresee and prepare for obstacles in order to be more effective when faced with a difficult ethical decision.

## **66** Heart Failure in the Elderly

*Graduate Student Project in Nursing*

**Sandra Bandel**

---

*Dr. Daisy Sherry*

More than 80 percent of persons diagnosed with heart failure are older than age 65. Heart failure significantly effects the quality of life in these persons. More research is necessary to improve the quality and length of life following diagnosis of heart failure.





## 69 Play Therapy Techniques

*Graduate Student Project in Social Science*

**Ashley Dotson, Maria Martinez  
and Alexa Cairo**

*Lisa Brown*

The focus of this presentation is to examine the processes of certain types of play therapy, specifically: sand tray therapy, expressive arts therapy, and imaginative therapy. Additionally, the benefits of each type have been evaluated in regards to their effectiveness with specific populations.

## 72 Disseminating Diabetes Prevention Education in the Community

*Graduate Student Project in Nursing*

**Elizabeth Black, Doreen Howell,  
Kathy Ostrander and Tracy Wallace**

*Dr. Gwen Svoboda*

The prevalence of diabetes among adults is projected to increase from 14 percent to 33 percent by 2050. Combining nursing experience and graduate level education, professional nurses will assist in facilitating a lifestyle change program, the National Diabetes Prevention Program (NDPP), at the Will-Grundy Clinic.

## 75 Breaking the Code

*Graduate Student Project in Social Science*

**Antionette Johnson**

*Kimberly Duris*

This study regards a review of literature about common ethical misunderstandings among novice counselors. This research includes a review of the 2014 ACA Code of Ethics, highlighting the main areas of concern for master-level counselors.

## 78 Infrared Runway Incursion Detection

*Graduate Student Project in Math/Science*

**Mark Wolfrum, Paul Kim, Brandon White,  
Matthew Suenkens, Matthew Sevik, and  
Ehteshamuddin Arif**

*Dr. Stanley Harriman, Dr. Ray Klump,  
and Dr. Randal DeMik*

The overall goal of this study is to further explore the usage of Infrared Cameras (IRC), or Infrared (IR) sensors to provide an additional tool to mitigate human factor errors as related to aircraft runway incursions. The proposed system will be used to provide additional visual cues by using in-ground lighting to alert both air traffic controllers and the pilots of taxiing aircraft to the proximity of airborne aircraft aligned with the active runway.

## **81** Anxiety in Adolescents and the Use of the Interpersonal Process Approach in Treatment

*Graduate Student Project in Social Science*

**Yenny Sanchez, Sarah Barrera, Angelina Rotar and Anthony Moreno**

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*Dr. Katherine Helm*

This presentation examines the association between the adolescent population and the treatment of anxiety with regards to an Interpersonal Process Approach.

## **84** Recovery Therapy in the Psychiatric Outpatient Setting

*Graduate Student Project in Nursing*

**Rubie Rose Costales**

---

*Dr. Kathleen Fitzgerald*

This poster presentation is a research proposal of the application of the Recovery model in the psychiatric outpatient setting and its potential effects on readmission rates and perceived levels of depression.

## **90** Leadership Development for Accelerated BSN Students

*Graduate Student Project in Nursing*

**Suzanne Lonngren and Cori Lester**

---

*Dr. Janice Smith*

Nursing needs strong proficient leaders. Leadership education and development at the BSN level is critical. With a goal to introduce students enrolled in the BAC to BSN program to leadership skills, a four module program was designed, implemented and evaluated as a series of seminars.



## **93** Surgical Safety Checklists: Impact on Patient Satisfaction Scores, Safety, and Surgical Staff

*Graduate Student Project in Nursing*

**Casey Valastro**

*Dr. Kathleen Fitzgerald*

The World Health Organization (WHO) has created a comprehensive, three-stage surgical checklist procedure to prevent errors in the operating room. The purpose of this study is to determine if the WHO safe surgical checklist procedure, compared to the time-out checklist procedure alone, will decrease the number of errors in the outpatient OR and improve patient and surgical staff satisfaction.

## **96** Nick Knack Camp

*Graduate Student Project in Education*

**Diane Meyer**

*Dr. Christopher Palmi*

This research project interviewed families with special needs children and determined their interest in an organized group camping experience.

## **99** Similarities and Differences Among Men and Women with Post-Traumatic Stress Disorder

*Graduate Student Project in Social Science*

**Kyle Goodwin, Patricia Martinez**

*Lisa Brown*

Research suggests there are differences among men and women being diagnosed with Post-Traumatic Stress Disorder. The purpose of this analysis is to show the diagnostics, emotional response, social support, and effective treatment in individuals diagnosed with Post-Traumatic Stress Disorder in both men and women. This study researched Post-Traumatic Stress Disorder, men and women, particularly similarities and differences that present themselves among the adult population.

## **102** The Concept of Burnout in Nursing

*Graduate Student Project in Nursing*

**Anna Wagner**

*Dr. Janice Smith*

Burnout has been a prominent discussion in the field of nursing not only due to its implications for nurses but also the well-being of patients and even the organizations nurses work for. A literature review on the concept of burnout and the related theory of the job demand-resources model provided valuable knowledge that can be applied to future research and practice.

## **104** Ethical Dilemmas During the End-of-Life-Stage

*Graduate Student Project in Social Science*

**Dawn Kelsey, Egon Menker  
and Kathryn Andersen**

*Dr. John Jurowicz*

This study addresses the importance of utilizing ethical decision making models when counseling patients at the end of life.

## **105** Engaging the Elderly CHF Patients in their Outpatient Care

*Graduate Student Project in Nursing*

**Natalie Grawey, Robin Hackett and  
Tamara Hill-Pryor**

*Dr. Janice Smith*

The purpose of this project was to improve health outcomes by educating patients on self-management strategies for heart failure and co-morbidities at Advocate Christ Medical Center Congestive Heart Failure (CHF) Clinic. The program creates opportunity for patients and family members to receive education in a group setting in addition to their scheduled clinic appointments.



## **106** Determining the Hazardous Effects of Flight Deck Laser Illumination Events: Phase 3

*Graduate Student Project in Math/Science*

**Megan Zahos, Nicholas Kazanjian, Joseph Burlas, Ehteshamuddin Arif and Bobby Hill**

*Dr. Stanley Harriman, Dr. Randall DeMik, Dr. Ryan Philips, and Dr. Suling Li*

Phase III was an interdisciplinary study within the Department of Aviation and College of Nursing and Health Professions at Lewis University testing the impact of the windshield coating on color vision.



Support provided by the Colonel Stephen W. and Lyla Doherty Center for Aviation and Health Research

## **107** Trial by Fire: The 3 Tempters of Stephen Dedalus

*Faculty Project in Humanities*

**Dr. Wallace Ross**

This publication argues that Buddhism was a major influence on the Modernist work of James Joyce. In particular, his first novel, *A Portrait of the Artist as a Young Man*, was specifically affected if not based on the Buddhist legend of the three temptations of the Buddha.

# Notes

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# LEWIS UNIVERSITY

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