

AN ENGAGED COMMUNITY



To the Lewis University Community:

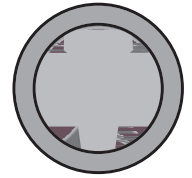
Welcome to the second annual Celebration of Scholarship here at Lewis University. This is an important academic initiative that follows last year's highly successful inaugural Celebration. The purpose is to recognize the scholarly pursuits of undergraduate and graduate students, as well as on the part of faculty. This year's ambitious and diverse program has as its theme, *Scholarship in Action: An Engaged Community*. Approximately 288 presentations, including 145 poster, paper and creative works, represent the sciences, business, humanities, arts, education and nursing. This very engaging and intellectually stimulating event occurs just a month after the rededication of the beautifully expanded Oremus Fine Arts Center, which provides several wonderful new settings for the scholarly and creative works of students and faculty through the display of art, drama and music.

Much gratitude for the considerable effort required to put together another excellent Celebration of Scholarship, including by co-chairs, Dr. Nan Yancey and Dr. Joyce Hayward, as well as by the other members of the Planning Committee. In particular, we are pleased and honored to welcome as the keynote speaker, Dr. Herb Childress, who is the Dean of Research and Assessment for the Boston Architectural College in Massachusetts, sr mel(e)-5.6(e is anCen)10(t)(æ)



Dear Colleagues:

Building on the success of our inaugural Celebration of Scholarship in 2012, we will again be recognizing and honoring the excellent scholarly and creative endeavors of our undergraduate and graduate students. We will also recognize the research, scholarship, and creative works of our gifted faculty, who contribute so significantly to our Mission.








Wicked Problems:

Why All of

CONCURRENT

(See Presenters Index on Page 58)

		<i>(1-2 PM) 7</i>
		<i>(2:30-3:30 PM) 14</i>
		<i>(4-5 PM) 21</i>
		<i>(5:30-6:30 PM) 27</i>

DL-203

Moderator: Jeannette Pifer



Undergraduate Student Project in Math/Science

Catherine Reese

Dr. J r R b r

Phantom limb pain (PLP) is a condition that affects nearly 80% of amputees, causing them to feel stinging, burning, spasms, and cramps along with unpleasant involuntary sensation of movements of their missing limbs. By exploring new advances in technology, as well as the methods and results of different treatment options, it is possible to determine the proper plan of action for patients suffering from this condition.



Undergraduate Student Project in Math/Science

Dominique Drouin

Dr. J r R b r

Female Athlete Triad Syndrome is a harmful condition with many medical risks that the female athlete might experience. The triad is composed of low energy availability (disordered eating), amenorrhea, and osteoporosis. This condition is noticed more in sports that promote weight loss and leanness.



Undergraduate Student Project in Math/Science

Brian Morgan

Dr. J r R b r

Tears to the anterior cruciate ligament (ACL) have become increasingly common in recent years. One common technique used to repair a torn ACL is the bone-patellar tendon-bone (patellar BTB) method. This presentation aims to explore how to most effectively perform ACL reconstruction using this method in order to maximize short-term and long-term results and to attempt to determine if the patellar BTB technique is in fact the best strategy for performing ACL reconstruction.

DL-230

Moderator: Ann O'Brien

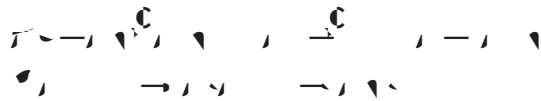


Undergraduate Student Project in Humanities

Mallory Godinez,

DL-232

Moderator: Suling Li



Undergraduate Student Project in Math/Science

Ramica Ford

Dr. Ja Ra

Recent studies have shown celiac disease to be prevalent in individuals with Type 1 diabetes.

is presentation will discuss both genetic and environmental factors influencing the prevalence of celiac disease in Type 1 diabetes patients.



Undergraduate Student Project in Math/Science

Cierra Gleffe

Dr. Ja Ra

is presentation includes potential methods for treating Parkinson's Disease such as dopamine-replacement drugs to aid mobility and muscle movement, and antioxidants to remove free radical build-up in the brain.



Undergraduate Student Project in Math/Science

Alexandra Wenckowski

Dr. Ja Ra

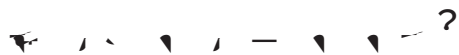
Inflammatory Bowel Disease (IBD) is an autoimmune disease which causes the lining of the intestines in the digestive tract to become inflamed and irritated. is presentation will discuss how the use of probiotics, alone or in synergistic combinations with other medications, can reduce and improve patients' remissions, negative

DL-233

2:30-3:30 PM

DL-202

Moderator: Betsy Wilber



Undergraduate Student Project in Math/Science

Victoria Colclasure

Dr. Jerrica Karrera

After a day of playing in the water, have you ever left a piece of clothing, a towel, a shirt, or a swimsuit for days without washing it? Do you know what you have brought home or how long these little guests stick around? This presentation focuses on the world of coliform bacteria and their relationship to fabrics.



Undergraduate Student Project in Math/Science

Daniel Nolan

Dr. Elizabeth R...

This presentation highlights the possible epigenetic effects on the variable expression of the phenotypes that describe asthma.



Undergraduate Student Project in Math/Science

Patrick Smith

Dr. Elizabeth R...

This study focuses on the research and development of photosynthetic algae and their use in creating biofuels that will help make this planet sustainable for human society.

DL-203

Moderator: Richard Clish



Undergraduate Student Project in Math/Science

James Fitman

Dr. J r R b r

Multiple sclerosis (MS) is considered an immune-mediated disorder affecting the myelin sheath of nerve fibers in the central nervous system of diagnosed individuals. The search for the origins of this disease has led to several hypotheses including onset as the result of a viral infection, a genetic predisposition, or a nutritional deficiency — specifically, vitamin D.

This research project is a comprehensive literature review that looked to assess the effects of serum vitamin D and the incidence/evolution of MS.

DL-230

Moderator: Ibrahim Mescioglu



Undergraduate Student Project in Humanities

Mark Jacobs

Dr. S M c

is persuasive essay emerged from a trilateral investigation of the potential impact of privatizing air traffic control in the United States.



Graduate Student Project in Math/Science

Richard Antonioli, Jennifer Pfeifer, Jacob Luedtke and Elizabeth De Waard

Dr. Ra da J. D M

Since 2005, reported laser attacks from people on the ground directed towards arriving and departing aircraft have increased more than 300%. A laser aimed at the windshield of an aircraft startles a pilot and may cause injury. is study determined empirical evidence of laser intensity in the flight deck and the potential for harm to the human eye at various distances.



Undergraduate Student Project in Math/Science

Courtney Makowski

Dr. Er Z r

is work looks into the major obesity epidemic

DL-231

Moderator: Erica Kwaitkowski-Egizio



Faculty Project in Social Science

Dr. Lynn Tovar and Dr. Tracey Nicholls

This presentation is a result of a qualitative research study conducted with students from Lewis University and women residing in a domestic violence shelter.

The study examines the use of short message service (SMS), also known as text messages, and their effect on domestic relationships. It focuses on the voices of respondents and their experience with abusive behavior and the prevalence of texting and GPS capabilities to control intimate partners. Their voices need to be heard!



Graduate Student Project in Social Science

Gabriela Zenati

Dr. Lynn Tovar

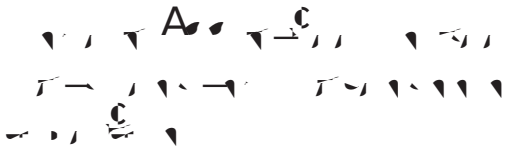
In recent years, the State of Illinois has considered proposing legislation against spanking as a form of punishment. Therefore, this research is currently relevant.

The purpose of the study was to examine the effects of corporal punishment on developing antisocial behavior in children and later on, in adults. The results of the surveys showed that corporal punishment did not create or facilitate the development of antisocial behavior such as depression, mental illness or poor performance in school among the respondents surveyed, which was in contradiction with the literature review on this topic.



DL-232

Moderator: Sarah Powers



Undergraduate Student Project in Math/Science

Elizabeth Schuhler

Dr. Ja Ra

This study involves research on the bacterial disease tuberculosis and its drug resistant forms. Emphasis will be placed on the many different drugs used for treatment and the new means of prevention, including vaccines.



Undergraduate Student Project in Math/Science

Heid Giusto

Dr. Ja Ra

This presentation will discuss Diabetes Mellitus and Alzheimer's disease and the correlation between the two. Recent advancements in the treatment of both diseases and how said treatments can improve health for patients affected by these diseases (both independently and in tandem) will be emphasized.



Undergraduate Student Project in Math/Science

Edwin Vargas

Dr. Va r Va d r V

Omega 3 fatty acids may help to improve many problems associated with Type 2 diabetes. This research paper focused on the effects Omega 3 fatty acids have on the cardiovascular problems associated with Type 2 diabetes.

DL-233

Moderator: Dr. Yann Kerevel



Undergraduate Student Project in Social Science

Melissa Pointer

Dr. J. Ga a

is study of gender differences among presidential voters in 2012 asks, "To what extent do men and women

DL-251

Moderator: Dr. Sheila Kennedy



Undergraduate Student Project in Math/Science

Harrison May

Dr. J  *N*

is research will develop an algorithm that will help identify what is acceptable Internet traffic from nefarious or questionable traffic.



Graduate Student Project in Math/Science

Brian Wilhelm and Dr. Ray Klump

Dr. Ra  *K*

is work proposes a federated approach to identifying cyber threats to the nation's electrical grid that can reduce their impact by limiting their spread.



DL-203

Moderator: Mary Adams



Graduate Student Project in Nursing

**Debora Painter, Cheryl Picard,
Kelly Rayburn and Kelly Sulo**

Dr. Jac S

is study quantifies the professional quality of life of perinatal nurses at two Midwestern hospitals since very little research exists concerning the topic. Based on study results, an educational program will be created in order to promote professional quality of life.

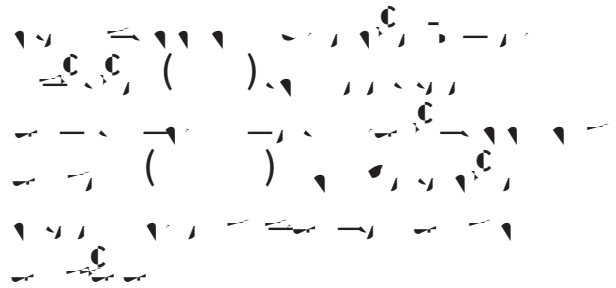


Graduate Student Project in Nursing

**Maria Ada, Marilyn Kloc,
JoAnn Landstrom-Pelikan
and Ramona Stanevicius**

Dr. Jac S

e purpose of this scholarly project was to develop interactive simulations for undergraduate nursing students to help students develop critical thinking skills and promote patient safety.



Graduate Student Project in Nursing

**Michelle Bassett, Amber Wright
and Jennifer Wolinski**

Dr. Jac S

A research study was conducted at Lewis University
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DL-231

Moderator: Jennifer Buss



Graduate Student Project in Social Science

**Rukiya Johnson, Al White
and Nicole Serle**

K b r D r

The use of psychotropic medications is a common practice in the treatment of Attention Deficit Hyperactivity Disorder (ADHD). However, there are many alternative forms of treatment also available for the treatment of this disorder in children. This presentation

DL-232

Moderator: Dr. Barbara Mackey



Graduate Student Project in Education

Carole Ross

Dr. J K

is presentation will discuss the literature examining the positive effects of equine-assisted therapy on autistic children, particularly in regard to increased balance,

DL-233

Moderator: Robert Bergman



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5:30-6:30 PM

DL-202

Moderator: Linda Niedringhaus



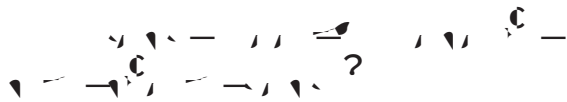
Graduate Student Project in Nursing

**Lisa O'Neill, Ann Podoba
and Jennifer Paszkowski**

Dr. G S b da

DL-203

Moderator: Anne McShane



Graduate Student Project in Humanities

**Samantha Parratore,
Emily McKenna, Dana Pauley,
Jessica Kush and Nicole Spencer**

Mar a Jar

This study looks at the process of Existential therapy and how it may be beneficial for people who have received a cancer diagnosis. Using literature review and previously conducted research, the benefits of Existential therapy and how it may lead to quality of life improvement are explored.



Graduate Student Project in Humanities

**Gia Saviano, Whitney Beck,
Mary Larson, Neveen Shalabi
and Danielle Posey**

Mar a Jar

This paper discusses how an Adlerian approach can be effective in the treatment of individuals with eating disorders.



Graduate Student Project in Humanities

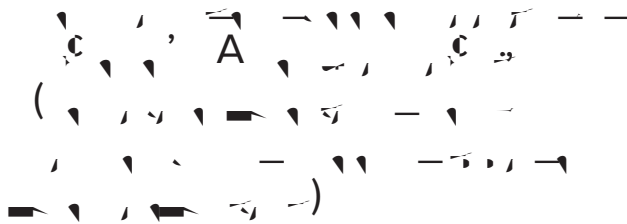
**Jamie Henrickson, Melissa Jelinek,
Kristine Chojnacki, Jessica Jackson,
Chivanda Goffin and Amanda Perniciaro**

Mar a Jar

This study addresses Narrative therapy as a treatment option for individuals with anger and aggression.

DL-230

Moderator: Dr. Pramod Mishra



Faculty Project in Humanities

Dr. Jackie White

This translation project presents 23 essays, previously available only in Spanish and now out of print, by an eminent and contemporary Caribbean (Dominican) scholar and poet, Chiqui Vicioso. By creating an English translation of not only her essays, but also of many poems and passages from Caribbean feminist writers who are virtually unknown in the U.S., the presentation strives to reach and inform while adding to the resources necessary for those doing scholarship in the areas of Caribbean studies, Latin American literature, and Latin American/ Third World Feminism.

Alexander's, The Tenant of Wildfell Hall

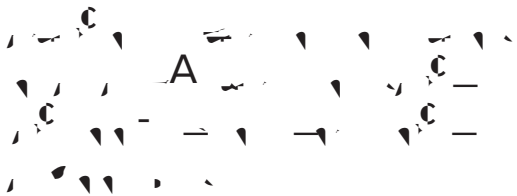
Faculty Project in Humanities

Dr. Nancy Workman

This presentation is an examination of sexual contagion as seen in this Victorian novel and sets the context for how the audience of the era would have understood its references.

DL-231

Moderator: William Blackwell



Graduate Student Project in Social Science

Linda Campbell

Dr. L Pa

Students today are exposed to a variety of technology and methods to create fraudulent documents in order to gain access and reduce tuition and fees at higher education institutions. They see opportunity as an acceptable means of behavior. The ethics and social responsibility education may reduce the propensity to cheat.



Graduate Student Project in Social Science

Dawn Dow

Dr. L Pa

Preparing the leaders of an organization for the future is a mainstay of most progressive institutions, but bureaucracies do not always rise to the occasion.

The urgency created by the impending retirement of a majority of leaders and supervisors for this organization and the lack of ready replacements may cause the administration to venture outside their comfort zone and institute a leadership development program to ensure their future success in providing Emergency Medical Services to their constituents.

DL-232

Moderator: Dr. Frank Rose



Graduate Student Project in Business

Annette Herbert

Dr. Gertrude K. C.

The strategies currently being used to retain employees and the effect of these strategies on retention will be discussed.



Graduate Student Project in Business

Jonathan Hannah

Dr. Gertrude K. C.

Today's nonprofit organizations are not totally separate from the government and profit-seeking companies. Nonprofits do compete for the most valuable asset in the marketplace—productive employees. This study suggests that nonprofits are primed to compete to a greater degree for the best employees due to the shifting priorities and worldview of the Millennial generation.



Faculty Project in Social Science

Mary Woods

This research study highlights the leadership and culture essential to effectively lead an ever-changing group of individuals who are unpaid so that volunteers, paid staff, and the organization receive value.

DL-233

Moderator: Dr. Chris Palmi



Graduate Student Project in Education

Danielle Ligocki

Dr. Brad P. r

This paper looks to uncover the ways in which sexism is still alive and well in both education and the wider society. It uncovers the hidden curriculum that permeates the classroom and the effects it has on both male and female students. Finally, this paper examines the difficulties involved in not subscribing to traditional gender roles, both in school and in society as a whole.



Graduate Student Project in Education

Erica Vuilleumier

Dr. Larissa H. a

Reflecting on the meaning of transformative leadership, picture images of students - students who are ignored, forgotten, destroyed - by adults in society. How does pop culture influence society's view on youth? Transformative leaders interested in hearing the voice of youth, ask society, do we do this enough? Are adolescents treasured members of our community?



Graduate Student Project in Education

Kevin Beirne

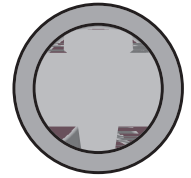
Dr. Larissa H. a

Schools are in need of critical transformative leaders. This paper explores the behavior of these leaders and how their work can not only transform schools, but restore vibrancy to our democracy.

CREATIVE WORKS

(See Presenters Index on Page 58)

 (1-6:30 PM) **35**
(2-4 PM) **37**



A
1-6:30/PM



Marker on Bristol

Alfredo Melendez

Mar S a

This piece marks a change from the artist's usual treatment of the subject of automobiles. This artwork, on a larger scale, uses a more aggressive feeling of the car charging at the viewer, rather than a depiction of a stationary car.



Watercolor and Ink

Jillian Carlberg

Mar S a

This piece is an exploration of character and setting. By placing forest animals in a seemingly normal setting, but giving them each a distinct personality, this piece is able to portray not only a sense of whimsicality, but also reality.



Silk Screen and Ink Print

Cassandra Pruitt

Mar S a

From the initial drawing to the finalized product, this piece has been created with the use of free thought and wandering imagination. The idea behind this piece was a mixture of philosophy and imagination meeting at the junction. Experimentation was a big key to finding the right balance of color and design.



Spray Paint and Charcoal

Bridget Cunningham

Mar S a

The artist used layers of soft colored spray paint to outline placed objects and then went back in



Oils, Watercolor, Acrylic, Spray Paint on Masonite

Connor McLennan

Mar S a

This piece simply shows two musicians, waiting on each other's next move within the song. The figure to the right is physically looking for signals of change while the figure on the left is listening for them. The models Angie Aguilar and Cassandra Ikeler (also known as Jupiter) were asked to "jam" a couple of songs as they were being photographed.



Photography

Michael Progress

This project will describe the process of taking multiple images and merging them together to create one final image through the utilization of CS6 Illustrator and Photoshop. The project will explore the planning and thought process involved in creating the visual image not only verbally, but also through the presentation of both the raw images and one final image.



Acrylic Paint, Magazine, Paper, Glue, Glitter

Nikki Nellen

Mar S a

This painting is about the artist's experience in Hawaii. The artist is in the middle of the painting and is looking over the city from a hotel room.



Oil on Canvas

Kate O'Neil

Mar S a

This piece is a remake of one of Lenoid Fremov's paintings. The artist experimented with a different color palette and a different texture. The use of bright, intense colors made this piece a particularly stunning re-creation.

CELEBRATION OF SCHOLARSHIP

11 0 1 2 3 4 5 6 7 8 9



Undergraduate Student Project in Social Science

**Jennifer Collins, Molly McDonald,
Jeremy Wiseman, Brianna O’Rozco
and Karnilla Kalfus**

Dr. Ga G r

Applied Sociology students surveyed and observed three samples of children, including two groups considered to be “at-risk” youth, who were involved in youth mentoring and bullying prevention programs. Findings from the research were compared with those of national studies and were incorporated to improve the bullying awareness and prevention programs offered through the Lewis University Big Brothers Big Sisters program and River Valley Elementary School in Lemont.



Undergraduate Student Project in Math/Science

**Lauren Jacobson, Sara Meyer,
Emily Grimm, Cassandra Myers
and Dipa Patel**

Dr. Ja K r

This work explores the physiochemical interactions between simulated soil particles and a widely used agricultural herbicide for weed management. More specifically, this work determined which conditions had a significant effect on the binding/adsorption of the herbicide to the simulated soil media. Langmuir binding isotherms coupled with molecular simulation provide mechanistic understanding that will play a role in shaping the design of next generation remediation technologies for reduction of herbicide transport in the soil.



Undergraduate Student Project in Nursing

**Jade Diaz, Melissa Kerr
and Kimberly Yung**

Dr. Katherine Ford

Three nursing research articles were critically appraised for the purpose of devising a recommendation related to allowing family members to be present during resuscitation and invasive procedures. Recommendations were based on evidence from surveys of different healthcare professionals, family members, and patients on the topic of family presence during resuscitation and invasive procedures.



Undergraduate Student Project in Math/Science

Kelly Tillman

Dr. Jennifer Kirk

Effective sapphire Chemical Mechanical Planarization (CMP) is still evolving. The reports of this study focused on basic chemical and mechanical investigations in an attempt to better understand interactions at the sapphire surface. This was accomplished via changes in the material removal rate (MRR) of the substrate.



Undergraduate Student Project in Math/Science

Daniel Cash

Dr. Jennifer Kirk

Chemical Mechanical Planarization (CMP) has emerged as a critical technology for achieving global planarization in advanced integrated circuit manufacturing. The CMP process is used to remove surface irregularities and to obtain uniform planarization of a silicon wafer surface. This research will focus on elucidating key interactions between slurry additives and substrates.

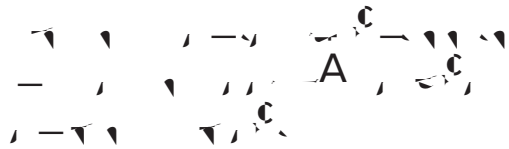


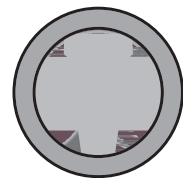
Faculty Project in Math/Science

Lark Welch

This study was conducted on patients who were reporting to skilled physical therapy for conditions of the knee, the shoulder and the spine. Plans of care of the patients' treatments included electrical stimulation of interferential current (IFC) to modulate their pain during rehabilitation. Patients' overall outcomes are described and quantified in terms of number of visits as well as effects of the IFC modality on pain modulation for the medical conditions.







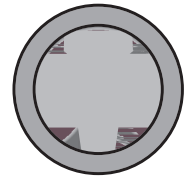


Undergraduate Student Project in Education

**Ashley Gazda, Nader Batayeh,
Megan Blum, Samantha Bosi,
Michelle Brandon, Christine Carey,
Brendan Casey, Jordan Dobbyn,
Kaitlyn Evoy, Guluzar Incekara,
Sarah Langheld, Kyle McKinley,
Sandra Saunders**

Dr. W a B ac

is an undergraduate team research project conducted by the 13 students in the Development and Characteristics of Learners course, designed for future special education teachers in the College of Education. e project examines the extent to which Web content on Illinois charter and private school

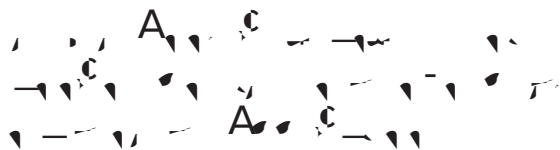


Undergraduate Student Project in Nursing

**Melissa Pagliaro, Allysha Jones,
Roxana Barrios**

Dr. Katherine Ferrara

This poster presentation regards the effects of complementary and alternative medicine on pain and anxiety levels in pregnant women, women undergoing mastectomy, and post-operative cardiac patients. Research conducted by nurses regarding yoga and music therapy were critically appraised for this presentation.



Undergraduate Student Project in Math/Science

**John Ephraim, Russell Johnson,
Natalie Garcia, Hubert Bilan,
Dominic Rebollar and Logan Johnson**

Dr. Jake Kiser

Building on a molecular understanding of photosynthesis and the established electron transfer principles of quantum dot-sensitized solar cells (QDSSC), this work has begun to develop flexible anodic nanomaterials for use in solar energy production.

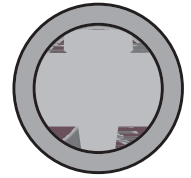


Undergraduate Student Project in Math/Science

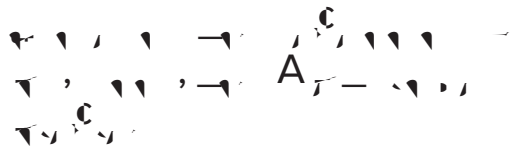
**Zachary Widel, Hubert Bilan
and Dominic Rebollar**

Dr. Jake Kiser

The excitation of quantum dots (QDs) by light sources make them ideal candidates for the splitting of water molecules involved in hydrogen production. The properties of the QDs directly impact their ability to effectively split water molecules into hydrogen and oxygen gas. Therefore, the factors that affect the reaction between the QDs, water, and the light source need to be explored in order to maximize the efficiency of hydrogen production.



5:30-6:30 PM



Undergraduate Student Project in Social Science

**Kelly Ortega, Joseph LoBue,
Jeanette Alksnis and Brittany Shreyk**

K b r D r

This poster presentation will explore the various uses of telecommunication in mental health counseling.

The many positive and negative consequences of introducing the use of technology in the client-counselor relationship will be identified. In addition, the need for acute attention to the various ethical issues related to the use of technology will be examined.

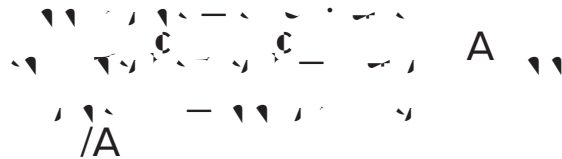


Graduate Student Project in Nursing

**Kara Nelis, Dana Rickard,
Pamela Perona and Jorge Bolanos**

Dr. M c K r a r

The purpose of this project was to learn not only the number of leadership certifications within the Illinois Organization of Nurse Leaders (IONL) but also the motivators, barriers, and benefits to obtaining these certifications.



Graduate Student Project in Social Science

Cyndie Penrose and Samantha Tyree

K b r D r

This presentation examines the ethical issues related to providing mental health counseling services to clients diagnosed with HIV/AIDS. Confidentiality, duty to protect, and compliance with federal and state laws regarding this piece of protected health information will be reviewed.

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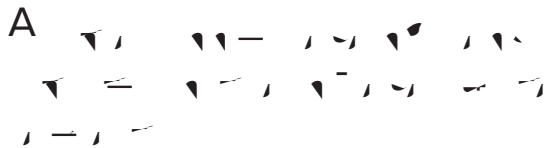


Undergraduate Student Project in Nursing

**Katherine Hodur, Sally Krempel,
Joan Rucker and Barbara Schuch**

Dr. G S b da

is project involves a process improvement plan in
response to the 2012 Illinois Department of Public Health's



Graduate Student Project in Nursing

**Reidun Juszczak, Anu Stephen
and Amanda Los**

Dr. A P r r

Literature supports the need for professional development programs for meso (middle) level nurse leaders, such as charge nurses, to help increase employee retention and to support high quality, safe patient care. Creating a professional development program specifically for the meso-level nurse leader, will help the nurse grow professionally and will also allow leadership to meet its strategic vision, which in the end leads to organizational success. The graduate nursing student team worked with a large Midwestern health system's nursing leaders to create a prototype for a professional development program for meso-level nurse leaders that could be offered in addition to the current development program for staff nurses.

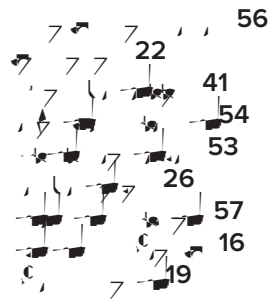


Graduate Student Project in Social Science

Kristina Annerino, Shawna Strausberger



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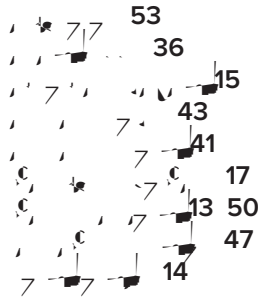
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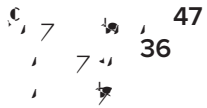
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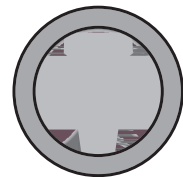
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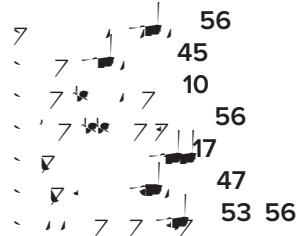


O





T



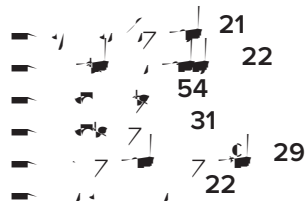
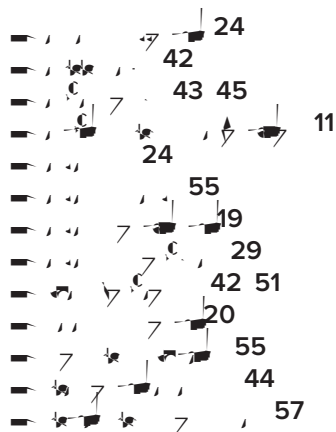
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V



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