2018

Undergraduate Research, Scholarship and Creative Investigations (URSCI) Exposition
&
Global Learning Symposium

Wednesday, April 4
Parmer Hall

Contents

URSCI Exposition and Global Learning Symposium

Reception

For More Information

PROGRAM OVERVIEW - MORNING

	URSCI Expo 108 Parmer Hall	**URSCI Expo 115 Parmer Hall**	**URSCI Expo 113 Parmer Hall**	**URSCI Expo 107 Parmer Hall**	**URSCI Expo & GLS 109 Parmer Hall**	**Posters Parmer Atrium**
8:30 – 9:30				CP Engl P2 Kristyn Valene, Jasmine Whiteside, Guillermo Pizano-Nunez, Jared Witherspoon		9:00 – 10:30
9:30 – 10:30	Honors Project Carmelita Villalobos (Biology)	Psych 1 (9:30 – 9:55 a.m.) Theodore Menet Psych 2 (10 – 10:25 a.m.) Whitney Adams	Phys 1 (9:30 – 9:55 a.m.) Jose Rangel Chem 1 (10 – 10:25 a.m.) Jeanette Rojas	CP Crim P1 Karla Perez, Kenia Balboa, Cristian Delgado, Isabel Diculescu, Elizabeth Encisco, Frederico Flores, Olivia Jucha, Claudia Maro, Esmeraldo Montesinos, Jamie Nikischer, Jessica Rivera, Kyle Rudauskas, Julie Vazquez	GLS P1 Guadalupe Alvarez, Melissa Arellano, Caroline Lippe, Anusha Mody, Joslyn Ramirez, Natalie Sanchez, Angelika Stec, Erlind Sulo	PS E Business MGMT 197
10:30 – 11:30	Distinction Project Abigail Ayala Josselin Lopez Joanna Rzepka (Psychology)	Ital 1 (10:30 – 10:50 a.m.) Giacomo Polinelli Ital 2 (10:55 – 11:15 a.m.) Gianna Dicintio	Art 1 (10:30 – 10:55 a.m.) Daniel Guillen Art 2 (11 – 11:25 a.m.) Jose Villareal Favela	Crim 1 (10:30 – 10:55 a.m.) Rosanna Fiasche	CBL P1 Paige Zawislak, Marcos Constantino, Esmeralda Montesinos	PS B Chemistry
11:30 – 12:30	Honors Project Domenica Bartnik (Economics)	Honors Project Amy Do (Chemistry)	Art 3 (11:30 – 11:55 a.m.) Monica Rodriguez Art 4 (12:00 – 12:25 p.m.) Timothy Piotrkowski	Music 1 Alexis Kottoulas	GLS P2 Pamela Arcentales, Megan Foy, Karen Olivera, Patricia Carerra, Raleigh Woodford, Jose Rangel, Brittany Caro	PS C Biology Physics Psychology

PROGRAM OVERVIEW
AFTERNOON

<table>
<tr><th></th><th>URSCI Expo
108 Parmer</th><th>URSCI Expo
115 Parmer Hall</th><th>URSCI Expo
113 Parmer Hall</th><th>URSCI Expo
107 Parmer Hall</th><th>Global Learning
Symposium
109 Parmer Hall</th><th>Posters
Parmer
Atrium</th></tr>
<tr><td>12:30
–
1:30</td><td>Honors Project
Adriana Espinoza
(Psychology)</td><td>Distinction Project
Gabriel Moreno
(Chemistry)</td><td>CP Engl P3
Jasminum McMullen,
Natalie Gonzalez,
Gabriela Molina,
Khayleen Wright</td><td>CP CS 1
Colin Pope Imperial,
Reynaldo Cardenas, Tyler
Brown, Mariana Plascencia</td><td>GLS 2
(12:30 – 12:45 p.m.)
Saba Raza
(12:50 – 1:05 p.m.)
Melissa Chavez
(1:10 – 1:25 p.m.)
Klaudia Perkowski</td><td>PS D
Internships
Accounting
Economics
Communication
Apparel Design &
Merchandising</td></tr>
<tr><td>1:30
–
2:30</td><td>Honors Project
Cathleen Fulmer
(Psychology)</td><td>Honors with Distinction
Sylvia Karpio
(Biology)</td><td>CP Engl P1
Caitlin Moran, Shaina
Warfield, Jasmine
Whiteside</td><td rowspan="2">CP Math 1
(1:30 – 1:55 p.m.)
Nevena Aleksich,
Joel Del Toro
Bianca Soto
CP Math 2
(2:00 – 2:25 p.m.)
David DeMarco
Amy Do
Jose Rangel
CP Math 3
(2:30 – 2:55 p.m.)
Joaquin Cardenas
Mariam Atawneh
Jacob Friesen</td><td>GLS 1
Era Doce
Marina Moeller
Jessica Rock
Shamia Clark
Francesca Millare</td><td>PS A

Art
Apparel Design &
Merchandising</td></tr>
<tr><td>2:30
–
3:00</td><td>Nutr 1
Morganne
Schmidt</td><td>Art Hist
Lorena Rodriguez</td><td>Engl 1
Jasminum McMullen</td><td>GLS 3
Sarah Odeh</td><td></td></tr>
<tr><td>3:00 pm</td><td>Parmer Atrium</td><td colspan="5">END OF DAY CEREMONY AND RECEPTION – FRIENDS & FAMILY ARE WELCOME – FOOD & DRINKS WILL BE SERVED
ANNOUNCEMENTS
• 2018 URSCI EXPO & GLS POSTER AWARD WINNERS
• 2018 UNDERGRADUATE SUMMER SCHOLAR PROGRAM (USSP) AWARDS
• EXCELLENCE in EXPERIENTIAL LEARNING AWARDS (ExcEL)</td></tr>
</table>

Degree with Distinction and Honors Projects included in the 2018 URSCI Expo

Abigail Ayala*, Josselin Lopez, Joanna Rzepka*****

*Degree with Distinction Project, **Honors and Degree with Distinction Project, ***Honors Project: The Cities Mentor Project: An intervention to reduce negative psychological outcomes in urban youth
Academic Discipline: Psychology
First Reader: Sophia Duffy
Second Reader: Tina Ritzler
Presentation location and time: 108 Parmer Hall, 10:30 a.m.

Domenica Bartnik

Honors Project: *Examining the Gender Wage Gap: A Comparison of Earnings within Occupational Groups*
Academic Discipline: Economics
First Reader: Susanne Schmitz
Second Reader: Dan Condon
Presentation location and time: 108 Parmer Hall, 11:30 a.m.

Amy Do

Honors Project: *Molecular Dynamics Study of the Photodissociation of ICN in Ethanol*
Academic Discipline: Chemistry
First Reader: Nicolas Winter
Second Reader: Gerald Gulley
Presentation location and time: 115 Parmer Hall, 11:30 a.m.

Adriana Espinoza

Honors Project: *What Matters to Latina College Students' Success*
Academic Discipline: Psychology
First Reader: Tina Ritzler
Second Reader: Tracy Caldwell
Presentation location and time: 108 Parmer Hall, 12:30 p.m.

Cathleen Fulmer
Honors Project: *Exploring the Influences of Family and Feelings of Individuality on Disordered Eating*
Academic Discipline: Psychology
First Reader: Tina Ritzler
Second Reader: Tracy Caldwell
Presentation location and time: 108 Parmer Hall, 1:30 p.m.

Sylvia Karpio
Honors and Degree with Distinction Project: *Drosophila melanogaster chemotaxis*
Academic Discipline: Biology
First Reader: Scott Kreher
Presentation location and time: 115 Parmer Hall, 1:30 p.m.

Gabriel Moreno
Degree with Distinction Project: *Computational Prediction of Blood Brain Barrier Permeability*
Academic Discipline: Chemistry
First Reader: Nicolas Winter
Second Reader: Joseph Sagerer
Presentation location and time: 115 Parmer Hall, 12:30 p.m.

Carmelita Villalobos
Honors Project: Coregulating Transcription Factors in the Retinal Determination Network of *Drosophila* Eyes
Academic Discipline: Biology
First Reader: Carissa Buber
Presentation location and time: 108 Parmer Hall, 9:30 a.m.

Bluhm Lecture Hall - 108 Parmer - URSCI Oral Presentations

9:30 a.m. | Carmelita Villalobos | Degree with Distinction and Honors Project
Coregulating Transcription Factors in the Retinal Determination Network of Drosophila *Eyes*
Carissa Buber

Different eye phenotypes in *Drosophila* tell us that there are genes which control development. These genes are transcription factors and I will be focusing on the retinal determination network which consists of the transcription factors Eya and So. When the transcription factors are able to function as normal we get a fly with wild type eyes. When we take away this network we see a loss of function eye that is deformed or discolored. With the evidence that we have now, we know that restricting Eya and So together will create these types of phenotypes because they limit cells from exiting the second mitotic wave. The cells that divide and exit the SMW become cells that are given specific functions to help the eye function. In my project I will be knocking down Akirin and Dachsund to see if they enhance or suppress the amount of cells dividing in the second mitotic wave.

10:30 a.m. | Abigail Ayala, Josselin Lopez, Joanna Rzepka| Degree with Distinction Project
The Cities Mentor Project: An intervention to reduce negative psychological outcomes in urban youth
Sophia Duffy

The Cities Mentor Project is a culturally-grounded intervention program for low-income urban youth experiencing community trauma. This study evaluates whether the intervention program positively impacts youth's ability to manage the risks associated with residing in communities with chronic stressors. Youth are taught trauma-informed coping skills, paired with an adult mentor to support coping, and connected to supportive after-school programming. Third through sixth grade youth were randomly assigned to receive the intervention or be placed in a wait-list control. Youth in both conditions completed socio-emotional and behavioral questionnaires pre-random assignment and three months post. This study specifically analyzes how the intervention program affects youth's internalizing symptoms (e.g. depression, anxiety), externalizing symptoms (e.g. hyperactivity, inattention) and school functioning (e.g. school problems) by comparing youth in both conditions on post assessment measures. IRB # 2017-248.

11:30 a.m. | Domenica Bartnik | Degree with Distinction Project
Examining the Gender Wage Gap: A Comparison of Earnings within Occupational Groups
Susanna Schmitz

Economic studies have identified the existence of persistent wage differences between men and women. However, reasons for this gap are often disputed. Proponents of policy and social changes point to underlying discrimination, while others claim the gap stems from gender-based preferences, personal choices and the attainment of productivity related attributes. This project presents an empirical analysis to determine how much of the gender wage gap may be attributed to labor market discrimination. Individuals within the data were separated into three

groups consisting of male-dominated, female-dominated, and gender-neutral occupations. Within these groups, annual wages of men and women are compared when taking into consideration differences in human capital, such as education level.

12:30 p.m. | Adriana Espinosa | Degree with Distinction Project
What Matters to Latina College Students' Success
Tina Ritzler

This research project looks at factors that drive students to pursue higher education. The purpose of this research project is to learn about and to better understand the lives of students through their personal narratives to build a grounded theory of what matters to their success as they pursue and persist higher education. Specifically, interviews with incoming first-generation Latina students were conducted to look at biculturalism, family, and religiosity/spirituality as motivating factors in the pursuit of post-secondary education. Study results will be presented and discussed.

1:30 p.m. | Cathleen Fulmer | Degree with Distinction and Honors Project
Exploring the Influences of Family and Feelings of Individuality on Disordered Eating
Tina Ritzler

Eating disorders affect approximately 10% of Americans and are also the most deadly of all psychological illnesses. A diverse sample of college students from Dominican University was surveyed to identify what predictors, if any, are most related to disordered eating. It was found that predictors commonly associated with disordered eating, such as self-esteem, are related, as well as factors not well studied, such as family life. The results of this study have strong real-world application in helping physicians know what psychological characteristics and life circumstances might indicate whether someone could be at risk for or suffering from disordered eating. IRB # 2017-224.

2:30 p.m. | Morganne Schmidt
Buckwheat incorporated Cookies - Undergraduate Research Assistantship
Yamunadevi Puraikalan

The present research is to develop a food product which is a rich source of proteins, antioxidants and dietary fiber as well as trace elements. The nutrient composition of the standardized recipes will be calculated using ESHA software and the objective evaluation will also be measured. Besides having a high biological value proteins, buckwheat grains contain some components which prophylactic value such as flavonoids, fagopyrins or thiamine binding proteins. Incorporating buckwheat in the daily diet is believed to help in the prevention and management of chronic diseases. The background behind the researcher’s interest in selection of buckwheat flour was due to common availability at affordable price. Also it was used extensively as a base ingredient for many other recipes for breakfast, snacks, lunch and dinner. Thus the investigator had chosen buckwheat to investigate the acceptability of buckwheat flour cookies with different flavors, objective evaluation and cost.

BCTLE - 115 Parmer Hall - URSCI Oral Presentations

9:30 a.m. (9:30 – 9:55 a.m.) | Theodore Menet
The Relationship Between The Gender Science IAT Malleability And Reliability
Tracy Caldwell

The Implicit Association Test (IAT) has been used to assess automatic associations that form the basis for prejudice. One such automatic association is between men and science and women and humanities, which is captured in the Gender-Science IAT. The goal of our present research is to investigate the malleability of implicit beliefs against the test-retest reliability of the gender-science IAT. We attempted to find this through administering the gender-science IAT twice. In between the IATs, participants were randomly assigned to receive one of three quizzes regarding either influential women in the STEM field, influential women in the humanities field, or flowers (control). If implicit beliefs are malleable, we expected automatic associations between men and science to decrease in the women/science condition (relative to the control) and to increase in the women/humanities condition (relative to the control). This pattern of data would replicate historically low test-retest reliability while also demonstrating the potential malleability of implicit beliefs. IRB # 2017-247.

9:30 a.m. (10:00 – 10:25 a.m.) | Whitney Adams
Curl Type and Skin Tone Discrimination
Tracy Caldwell

Colorism has largely been explored by skin tone discrimination; however, hair type can also be an extension of this discrimination, especially with Black women. With the rise of the natural hair community, the movement celebrates peopleâ€™s natural hair texture as opposed to manipulating hair into a more socially acceptable form. The issue that this study will explore is whether the majority of people have a preference towards Black women with lighter skin tone and looser curl type over Black women with darker skin tone and coily hair. In my study, participants will play the role of an interviewer for a company hiring for an accountant. The main hypothesis is that there will be an interaction of skin tone and hair type, such that the lighter skinned target with curly hair will be rated as more professional, attractive, and credible than any other target. IRB # 2017-256.

10:30 a.m. (10:30 – 10:50 a.m.) | Giacomo Polinelli
L'amor che tutto move…
Tonia Triggiano

This research begins at the very end of Dante's *Divine Comedy* with the verse "*l'amor che move il sole e l'altre stelle*." This verse promotes the idea that God is Love and that He is the Unmoved Mover and the One who governs everything through His love. I will argue that "sin" itself does not exist; what we call sin is in fact the improper use of it. Love is God Himself who gives humans the ability to love; it is up to them and to their free will to understand how to use it correctly. I will discuss the idea that the love of God is endless and even if we misuse the gift of Love and we

repent in time, we still have an opportunity to be saved and be with Him. I will explain Dante's view of Love and present the way in which such idea is central to his poetic. I will describe how Dante's explanation of Love is situated in the very center of the entire *Comedy*.

10:30 a.m. (10:55 – 11:15 a.m.) | Gianna Dicintio
Divine Self Help: A Psychological Outlook of The Divine Comedy
Tonia Triggiano

When reading *The Divine Comedy* by Dante Alighieri, there are many different outlooks through which the reader can analyze this work. Taking us through his journey, Dante lets us explore the dimensions beyond our world and into the depths of hell, climbing the mountain of the purgatory, and into the realm of heaven. Although the voyage notes Dante as the protagonist, there is the overwhelming feeling of immersion one gets when reading this work. For this reason, the work is not only a literary iconic masterpiece, rather it transforms into a source of self-help in which one can seek their true self. Through the cantos, readers find themselves connected to the protagonist, experiencing his emotions and triumphs as he walks where no living human has gone before.

11:30 a.m. | Amy Do | Degree with Distinction and Honors Project
Molecular Dynamics Study of the Photodissociation of ICN in Ethanol
Nicolas Winter

The influence of solvent on chemical reaction dynamics is a topic of great importance in many areas of science including condensed phase physics, medicine, geology, and industrial chemistry. While photodissociation, the breaking of bonds when hit by light, has been studied extensively in the gas phase, less is known about this type of reaction in solution. In this work, the photodissociation and photoisomerization of ICN in ethanol was modeled using molecular dynamics simulations. The simulations provide a detailed microscopic picture of the influence of ethanol on the photodissociation process and how ethanol compares to previous simulations of this reaction in water.

12:30 p.m. | Gabriel Moreno | Degree with Distinction Project
Computational Prediction of Blood Brain Barrier Permeability
Nicolas Winter

The capability of a drug to cross the blood-brain barrier is an important quantity to be tuned depending on the drug target location in the body. This study focused on various drugs and their ability to cross the blood-brain barrier. Computational methods were used to determine which physical and chemical characteristics of a series of molecules correlate with blood-brain barrier permeability. A quantitative predictive model was developed that could potentially be used to aid drug discovery.

1:30 p.m. | Sylvia Karpio | Degree with Distinction and Honors Project
Drosophila melanogaster chemotaxis
Scott Kreher

The sense of smell is based on the detection of odor molecules by protein odor receptors. It is unclear how odor receptors encode odors and allow the organism to behave in a certain way. To examine the process of odor coding in the fruit fly, Drosophila melanogaster, we tested chemotaxis behavior of larvae. Previously, a few odor receptors and coding of attractants was analyzed. For my project, we analyzed both repellents and combinations of attractants and repellents. Some odors act as repellents at high concentrations (consistent with previous findings). The next steps involved testing odors as blends of repellents and attractant; the repellent was dominant. For combinations of odors, we needed to rule out confounding factors that may have influenced behaviors. Therefore, we tested odors blended together and combinations that were presented adjacently. We tested behavior in multiple configurations of the behavioral arenas, and there was consistency.

2:30 p.m. | Lorena Rodriguez
Sally Mann, Photography, and Visualizing Loss
Kim Theriault

This thesis deconstructs Sally Mann's portrayals of imminent loss by examining the metaphorical images she creates of her children and husband. Expressing her fears through visual interpretations of fleeting innocence and the inevitability of death, Mann creates works that manipulatively pose her young children as adults, removing their inherent purity and naivete, and depict her husband as a lifeless being, his body slowly deteriorating from the progression of muscular dystrophy. Further complicating the viewer's perception, Mann's use of a 19th century glass plate camera, infuses the black and white images with nostalgia and the impression that her subjects are already part of a historic past. Conveying an anticipation of loss, but in an unsentimental way, Mann's melancholic art ultimately forces the viewer to differentiate between perceived reality and constructed truth, which are fundamental ambiguities inherent in the medium and practice of contemporary photography.

113 Parmer Hall - URSCI Oral Presentations

9:30 a.m. (9:30 – 9:55 a.m.) | Jose Rangel
Multi-Directional Cosmic-Ray Muon Tracker Prototype
Joseph Sagerer

Over the past two summers I have worked with Dr. Sagerer to construct a multi-directional muon tracking device. In simple terms, this is similar to an x-ray machine with the purpose to scan through the walls of pyramids and find hidden chambers. The project is currently in its prototype stage and continuing with testing. This past summer (summer of 2017), which I obtained the USSP award for research; simulations were made using Geant4. These simulations are a very powerful tool to obtain initial data to calibrate the machine. We generated simulations of muon showers over a pyramid at different energy levels. The simulations gave a basis of what should be expected to be seen from the prototype in a real-world test. These are especially helpful in order to calibrate optimal settings to ensure accuracy. Large arrays of data were obtained and analyzed from these simulations using histograms. The long term goal of this project is to look through the pyramids of Chichen Itza Mexico.

9:30 a.m. (10:00 – 10:25 a.m.) | Jeanette Rojas
Benzil Bros: Reactions of Benzil
J. Brent Friesen

The synthesis of benzil and its subsequent transformation into benzilic acid are popular undergraduate Organic Chemistry laboratory experiments. We explored alternative reactions of benzil that could be incorporated into the Organic Chemistry laboratory curriculum. The double aldol condensation of benzil and diphenyl acetone to form purple tetraphenylcyclopentadienone, reaction of benzil with urea to form diphenylhydantoin, the reduction of benzil to hydrobenzoin with sodium borohydride, and the condensation of benzil with cyclohexane + ammonium were accomplished. However, the most promising reactions were a series of condensations between benzil and 1,2-diaminobenzene (o-phenylenediamine) or its derivatives to produce a quinoxaline. Four different 1,2-diaminobenzene derivatives gave crystalline quinoxaline products in good yield. Products were analyzed with Infrared, UV-vis, and nuclear magnetic spectroscopy, as well as gas chromatography with flame ionization detection.

10:30 a.m. (10:30 – 10:55 a.m.) | Daniel Guillen
Humans of Chicago's Avenues
Javier Carmona

This project is entitled Humans of Chicago's Avenues and will be a documentary style presentation showing the fundraising efforts for Chicago's homeless. The presentation will begin with the reading of my story "Humans of Chicago's Avenues," which is still currently in the editing process. The next part of the presentation will be explaining how this story and interactions with Chicago's homeless has brought me to do this URCI project. The story goes into detail how I believe the human experience has become very self-centered. I hope to humanize the homeless so the

audience questions their own actions. Perhaps ways to recognize the homeless as people. I plan on highlighting how larger efforts are just as good as the small ones to help others. The presentation would consist of verbally speaking most details. But within the presentation will be my photos of the efforts and the individuals I speak about. The last section would be a short film showing the supply and food drive at my Church. And any footage I can record of handing out the supplies. The goal is to have the audience reflect on our tendencies. I want to inspire and encourage a call to social action. And be an example of what one person can do within not just their community, but their city.

10:30 a.m. (11:00 – 11:25 a.m.) | Jose Villareal Favela
Flashes of Life - A Stop Motion Presentation
Javier Carmona

Stop motion is a film-making technique that physically manipulates objects to make them seem to be moving on their own. By using this method, this film project will explore the lifetime of an individual. It will focus on the accomplishments as well as the struggles we all may face throughout our lives.

11:30 a.m. (11:30 – 11:55 a.m.) | Monica Rodriguez
The Fine Line Between Still and Motion
Javier Carmona

An examination of the process and difficulties faced when trying to hybridize the properties of film and photography into one. With a focus on form, composition, and timing, we will look at artists with work that explores the world that exists between the two mediums.

11:30 a.m. (12:00 – 12:25 p.m.) | Timothy Piotrkowski
The Stage, The Screen And Everything In Between
Javier Carmona

When acting made its transition from the stage to the screen, acting styles perviously used by performers failed to translate in the same way they did in the theatre. As a result, different techniques and nuanced methods developed. Acting styles for stage and screen continue to thrive in the entertainment business, but what is their relationship to one another, their commonalities and their defining differences that make them both distinct? Through exploring the most important piece of this relationship, the audience, we can discover and understand the relationship between these two power houses of the acting world, and how they shape the entire entertainment history from its origins all the way to the present day.

12:30 p.m. | Natalie Gonzalez, Jasminum McMullen, Gabriela Molina, Khayleen Wright
Transatlantic Modernism: English 430 Research Projects
Daniel Anderson

Graduating English majors who concentrate on literature or education complete a senior seminar. In this panel, several students will present their research projects from this year's seminar, which focused on the theme of Transatlantic Modernism. A discussion, including time for questions, will follow the presentations.

1:30 p.m. | Caitlin Moran, Shaina Warfield, Jasmine Whiteside
Writing to Inform: Examining Underrepresented Perspectives in the Writing Workshop
Maggie Andersen

Panelists will read creative work generated in workshop and testify to the culture of workshop as a place for conscious criticism, diversity of perspective, and the question of representation. Valuing diverse perspectives challenges the error of elevating relatability as a valid assessment of merit.

2:30 p.m. | Jasminum McMullen
Writing in Bloom: The 77th Annual Indiana University Writers Conference
Maggie Andersen

A graduating senior discusses her first writers' conference experience in Bloomington, Indiana, where she studied with some of the most celebrated living American writers. In this oral presentation, focused on her workshop experience with the poet Morgan Parker, Jasminum will share the creative work she generated as well as the insight she took away. In addition, she will share lessons from her fiction and graphic novel classes and tips she learned about reading for an audience.

107 Parmer Hall - URSCI Oral Presentations

8:30 p.m. | Guillermo Pizano-Nunez, Kristyn Valene, Jasmine Whiteside, Jared Witherspoon
Stella Veritatis: The Many Voices of Dominican University
Maggie Andersen

Stella Veritatis is a a literary magazine created by two classes. Through editing and design, two departments have come together to create a literary representation of the Dominican University community. Come listen to a panel of the students as they discuss their experiences from the process and hear some of the pieces that will be found in the magazine that will be released in the fall.

9:30 a.m. | Kenia Balboa, Cristian Delgado, Isabel Diculescu, Elizabeth Encisco, Frederico Flores, Olivia Jucha, Claudia Maro, Esmeraldo Montesinos, Jamie Nikischer, Karla Perez, Jessica Rivera, Kyle Rudauskas, Julie Vazquez
Crimmigration in Crook County
Michelle VanNatta

The crimmigration crisis has become increasingly alarming since the new presidency. The term “crimmigration” was coined by scholars to refer to the increasing criminalization of migration into the US. Because of this, we have taken an interest in studying how treatment of immigrants is shifting in the criminal court system. We have collaborated with PASO (West Suburban Action Project) all semester in courtwatching, observing at DuPage, Maywood, and Leighton criminal courthouses and the federal immigration court in Chicago. We are collecting data on how immigration agents and courtroom personnel interact with defendants in criminal cases who are born outside the United States. Our presentation will address issues such as racial profiling, language barriers, legal representation, institutional racism and sexism, and power dynamics. We will also present resources for those who are impacted by or want to take action around immigration injustice. We hope to raise awareness and increase activism. IRB # 2017-258.

10:30 a.m. | Rosanna Fiasche
Survey Research Result of Student Perspective of Rape Myths
Michelle VanNatta

My research is still underway and I will present my preliminary results. My research project is looking at two different groups on campus, those who are part of the athletics department and those who are not. The study draws out and compares ideas of sexuality and consent in these two groups. The scale I am using is the Rape Attitudes and Beliefs Scale created by Gerald Burgess.My study investigates whether being in an organized sport correlates with the attitudes and beliefs of the students. Are there differences in how athletes perceive consent compared to non-athletes on Dominican's campus? Do non-athletes have different levels of agreements with rape myths? I look at female athletes and male athletes specifically to see if their idea of consent and sexual attitudes differ to the ideas of male and female students who are not part of an organized sport.

11:30 a.m. | Alexis Kottoulas
Translation to Sound: The Dante Suite
Jeffrey Kelly

The story of a pilgrim who is taken on a journey through the afterlife, Dante's La Commedia is among literature's most recognizable works. It has inspired countless artists to bring their interpretations of the text to increasingly diverse audiences, keeping the tale alive and relevant through each incarnation. In this, The Dante Suite is a continuation of the musical tradition which takes literary masterpieces and communicates them through sound. During this lecture, I will discuss my process of creating the suite including the way in which text directly influences the final composition in form, timber, texture, and instrumentation. Additionally, there will be a showing of audio/visual samples from the performance of the work, allowing the audience to here for themselves examples of this text being translated into sound.

12:30 p.m. | Tyler Brown, Reynaldo Cardenas, Colin Pope Imperial, Mariana Plascencia
300 Meters: This is Trebuchet!!!
Esmail Bonakdarian

The purpose of this project was to create an electronic assisted small scale trebuchet toy. This toy is meant to be an affordable project for any hobbyist, history enthusiast, or toy maker. Our electronic components are not required for a trebuchet to work, therefore any working trebuchet could be augmented with our computerized electronic components to enhance its capabilities. Our trebuchet can be constructed using common materials alongside the easily accessible raspberry pi platform, any monitor that will take HDMI output, and common electronic components found in hobby stores. For the sake of durability and appearance we used brand new lumber. The capabilities of the electronic assisted trebuchet include: auto-aiming capabilities, remote control capabilities, command line control capabilities, a pov camera, and shot calculation. This reduces the user's task to only manually reloading the trebuchet.

1:30 p.m. (1:30 – 1:55 p.m.) | Nevena Aleksich, Joel Del Toro, Bianca Soto
Applications in Abstract Algebra: Encryption/Coding and Calendar Calculations
Aliza Steurer

We will present on "Applications in Abstract Algebra: Encryption/Coding and Calendar Calculations". The paper discusses several applications in abstract algebra, but we are going to focus on one of the more common applications, cryptography. Cryptography is the science or study of secret writing by transforming information into an unreadable format. Cryptography is around us wherever we are; it is in banking, online transactions, computer passwords and so much more. There is public and private key cryptography. Private key cryptography requires the sender of a message and the recipient to exchange a key, and unwanted parties can intercept this key. We will instead explore public key cryptography, which does not have these complications. Specifically, we will discuss Diffie-Hellman Key Exchange and ElGamal Encryption. Diffie-Hellman allows a sender and a recipient to exchange a key publicly. Once the key is exchanged we can use ElGamal Encryption to send one another a message.

1:30 p.m. (2:00 – 2:25 p.m.) | David DeMarco, Amy Do, Jose Rangel
The Significance of Mathematics in Forensic Science
Aaron Zerhusen

Finding a time of death of a murder victim is essential in proving the guilt or innocence of a suspect. An accurate mathematical model for the temperature depletion from the body postmortem with respect to time could prove vital to an investigation. It would allow investigators with no forensic background to simply input the temperature information of the victim and receive an quick and precise time of death. The case study "Who Dun' it?: Investigations in the Mathematics of Forensic Science" by Kristin Ranum discusses the various approaches to find the best predictor of body temperature based on Newton's Law of Cooling. Further investigation was needed in order to refine the interpolation techniques that were analyzed, which include linear and cubic splines and polynomial Lagrange functions.

1:30 p.m. (2:30 – 2:55 p.m.) | Joaquin Cardenas, Mariam Atawneh, Jacob Friesen
Probabilities of Palindromes
Paul Coe

A palindrome is a word, phrase, or sequence that reads the same forwards as backwards. Palindromes can occur using digits 0-9 (eg. 121, 333, 45654) as well as letters A-Z ("noon", "radar", "level") If we start writing digits randomly, what is the probability that at some point the digits we have written so far will form a palindrome? Our presentation answers this question by proving the following theorem: Given a palindrome s of length n, if there is a proper initial substring of s which is also a palindrome, then there is an initial substring of s of length less than n/2 + 1 which is a palindrome.

109 Parmer Hall - URSCI and Global Learning Symposium Oral Presentations

9:30 a.m. | Guadalupe Alvarez, Melissa Arellano, Caroline Lippe, Anusha Mody, Joslyn Ramirez, Natalie Sanchez, Angelika Stec, Erlind Sulo
Colonialism, Poverty, and Disability: Practicing Dominican's Mission in Haiti
MaDonna Thelen

Dominican students embarked on a transformative journey to Haiti during the Spring Break of 2018. In this presentation, students will discuss the various social realities in Haiti, such as the lingering effects of colonization, poverty, and facing disabilities in under-resourced communities, as well as celebrating the rich, beautiful people and culture of Haiti.

10:30 a.m. | Paige Zawislak, Marcos Constantino, Esmeralda Montesinos
Community Based Research: Being a Social Justice Advocate for Violence, Immigration, and Mental Health
MaDonna Thelen

Do you want to learn more on how to be a social justice advocate? Join the Social Justice and Civic Engagement Capstone class as we discuss our individual research projects and share how you can be a social justice advocate on these issues. We will each share individually about our projects and the research that we found, why they are social justice issues, and then discuss how we can all be better social justice advocates for these issues and any other issue. Our individual projects focus on three different social justice issues which are violence, immigration and mental health.

11:30 a.m. | Pamela Arcentales, Patricia Carerra, Megan Foy, Karen Olivera, Jose Rangel, Brittany Caro, Raleigh Woodford
Feminism and Guatemalan Women
MaDonna Thelen

Do you want to learn more on how to be a social justice advocate? Join the Social Justice and Civic Engagement Capstone class as we discuss our individual research projects and share how you can be a social justice advocate on these issues. We will each share individually about our projects and the research that we found, why they are social justice issues, and then discuss how we can all be better social justice advocates for these issues and any other issue. Our individual projects focus on three different social justice issues which are violence, immigration and mental health.

12:30 a.m. (12:30 – 12:45 p.m.) | Saba Raza
India: A Transformational Humanitarian Journey
Ellen Alamilla

I would like to present on how I used my Excel Scholars award to travel to India for 5 weeks and help out at an orphanage in the slum of Shaheen Nagar. I want to inspire students to use our Dominican values (Caritas Veritas) as they also step out of their comfort zone and help people at home and abroad. I am also preparing a short video documentary along with my presentation. The video will be between 10 and 15 minutes.

12:30 p.m. (12:50 – 1:05 a.m.) | Melissa Chavez
How Interning at Claire's Defined My Career Path
Paul Simpson

This session will focus on the value I found through my internship experience with Claire's as an Operational Marketing intern. As a Marketing student, my 12-week experience allowed me to gain crucial real-life marketing experience through a rebranding market research project that was assigned to me. Along with other assignments involving social media and competitor research. And most importantly, I was provided with exposure into the different roles and functions that lie within the marketing realm. Not only was I able to gain valuable experience that would then lead me to obtain two more internship experiences, but I was also able to discover the type of industry and positions I want to work in once I graduate from Dominican. With the marketing industry being so broad, it is crucial for one to gain more insight through internship experiences into what you like and do not like in order to further define the career path you want to set for yourself once graduating, which is exactly what I did with my Claire's internship.

12:30 p.m. (1:10 – 1:25 p.m.) | Klaudia Perkowski
Peruvian Culture: A Look Beyond the Machu Picchu Tourist Scene
William Kerr

Over winter break, I traveled to Peru where I worked with children in an after school program. While I was there I did research on culture and interviewed people from Peru. My presentation will be about my research and the series of small paintings I made while in Peru.

1:30 p.m. (1:50 – 2:20 p.m.) | Shamia Clark, Era Doce, Francesca Millare, Marina Moeller, Jessica Rock
Adventures Outside of the Classroom
Alexis Howe

The students who studied abroad in Salamanca, Spain during fall semester 2017 will present their personal experiences while abroad and the importance of studying abroad as a valuable resource for expanding their education in a multicultural world. The presenters will also describe the impact that the EXCEL scholarship had on them and their journey to experience new cultures.

2:30 p.m. | Sarah Odeh
Medicinal Service and a Dash of Cultural Exploration
Mark Carbonara

International Service Learning’s Baja Mexico program is an on-going humanitarian project that addresses major medical issues in the Baja region of Mexico. Sarah worked with global health agencies, local health ministries, and other non-governmental organizations to build capacity in the partner communities. Around the local community of Puerto Penasco, Sonora, Mexico, Sarah had the opportunity to work alongside doctors by administering health assessments and aiding the local hospital in the emergency room. Working alongside Dr. Eliel Lopez in administering physical health examinations in clinics was an inspiring experience for Sarah. Sarah was able to visit local residents' houses to carry out family history examinations and home evaluations. Seeing patients with extreme cases of cataracts, glaucoma, hypertension, and teeth decay, Sarah got to take home different lessons, experiences, and memories from her trip. Join to learn more about this educational adventure.

Parmer Atrium - URSCI Focus on Art Slide Show

Dominican University Annual Juried Student Exhibition

Each year, Dominican University showcases the extraordinary artistic talent of its student body by hosting an Annual Juried Student Exhibition. This annual group show gives students the opportunity to have their artwork shown in the O'Connor Art Gallery and compete for cash prizes. Held each spring semester, it is open to all Dominican students regardless of major, and students may submit up to five works in any medium completed within the last year. After the submission deadline, Dominican University art department faculty select certain works for inclusion in the show, choosing works based on a combination of aesthetic and conceptual merit. After this initial selection, an outside guest juror awards prizes in different categories such as Best in Show, Best Color Photograph and Best Sculpture.

Because the guest curator is usually a prominent local curator, critic or art dealer, the Annual Juried Student Exhibition is a unique opportunity for students to have their work judged by an established and seasoned art world professional. This year's juror was Elizabeth Lalley, the Assistant Director of Goldfinch Gallery in Chicago and a writer and critic for Chicago's NewCity magazine. Elizabeth Lalley is a Chicago-based writer and independent curator, and the Assistant Director of Goldfinch Gallery. She received an MA in Museum & Exhibition Studies from the University of Illinois-Chicago, and holds a BA from the University of Michigan where she received the Academy of American Poets Award. Elizabeth has worked for the Chicago Artists Coalition, the Smithsonian Center for Folklife & Cultural Heritage, and the University of Michigan Department of English. She is a Curatorial Fellow with ACRE (Artists' Cooperative Residency and Exhibitions) and a contributor to NewCity and Chicago Artist Writers.

Each Annual Juried Student Exhibition kicks off with an opening night reception, which serves as a celebration of Dominican students' continued excellence in visual art. This year, the 2018 Annual Juried Student Exhibition Awards ceremony took place on Wednesday, March 14 in the O'Connor Art Gallery.

Best of Show
Claire Groppe, *Noonan Reading Room*, Charcoal on paper, 18 x 24 in.

Best Painting
Klaudia Perkowski, *Couple Lounging 2,* Oil on canvas

Best Drawing
Ushma Patel, *Pelvis Studies*, Charcoal on paper

Best Color Photography
Alondra Cardenas, *DU Dorm Series,* Color photography, eight 6 x 9 in. photographs

Best Black and White Photography
Monica Rodriguez, *Golden*, Acrylic paint on silver gelatin print

Best Graphic Design
Patrick Owoc, *Kodak Film Series,* Inkjet Print, 2.5 x 1.5 x 1.5 in

Best Typography
Nicole Gardner, *Chicago Artist Coalition Work in Progress 2018 Poster*, Archival inkjet print, 8.5 x 11 in.

Best Printmaking
Nicole Fuentes, *Portrait*, Ink on Paper

Best Sculpture/Mixed Media
Alyssa Kulinski, *My Secret Garden.* Plaster, found objects, paint, enamel, LED light. 29.5 x 15 in.

Best Ceramics
Sabrina Class, *Submerged,* ceramics

Dean's Choice
Lauren Hansford, *Noonan Reading Room*, Charcoal on paper

Honorable Mentions
Printmaking: Sara Martello
Graphic Design: Kathleen Burns
Ceramics: Alice Arreola

Parmer Atrium - URSCI and GLS Poster Presentations

9:00 – 10:30 a.m. | Business (MGMT 197)

(* designates the team captain)

These poster presentations are a competition between teams of students participating in the Management 197 Gateway Business Practicum. The students come from four different classes and their task was to propose ideas for new businesses that are both for-profit and sustainable. Those with the top ideas became team captains, who were joined by other classmates to research and assess the feasibility of these business ideas. Each business must work toward at least one Sustainable Development Goal as laid out by the United Nations PRME organization. Teams will be judged by members of the business community who will evaluate them and then invest (fake) money in their top teams. The teams earning the most money invested will be declared the winners.

Hayden R Cochran, Daniel J Defino*, Aldo Y Hinojosa, George B Sherman
Electro Wallet
Yuanqing Li

Khrystyna Doskochynska, Jianna R Keska, Grace Krusinski*, Robert S Pickert
Kid's Car
Yuanqing Li

Susan Adame, Raymundo Porcayo, Diego J. Rios, Natalie M Stellato*
Super Soles
Yuanqing Li

Arlene D Miranda, Ryan A Simak*, Gabriel Smyk, Alfonso Soto
Retractable Cleat
Yuanqing Li

Gisselle Adunas*, Alyssa G Czachor, Juan F Gallegos, Katherine J Velazquez
Dr. Nano
Yuanqing Li

Jasmine Ramirez Morales, Ruth Rodriguez, Victoria Valentin*, Wiktoria A Wielgus
Toys Direct
Yuanqing Li

Melvin A Cardenas, Nicole Diaz, Gillian R Jones, John J Mcguire*
Simple Things
Yuanqing Li

Jesus Delgado, Jessica M Khamo*, Noe Padilla, Jorge I Ramirez
Mold A Road
Yuanqing Li

Tiombre Jones, Nicholas M Lavere, Paola L Montenegro*, Grace J Morales
Pick It
Yuanqing Li

Cesar Franco, Taras Khvostyak, Pablo D Montalvo*
Esperanza
Yuanqing Li

Vanessa Aguilera*, AlHanouf T Benmedhayan, Marissa A Gradei, Luis D Patino
T.O.M.
Derek Ruth

Michael J Cross*, Alberto G Garcia, Manuel M Meneses, Angelica M Socha
Aurelius Financial Services
Derek Ruth

Amirah S Alzahrani, Kevin M Evans, Gerardo Lopez, Jennifer A Lopez*
Furry Friends Care Services
Derek Ruth

Marin I Bandalo, Troy L Kates*, Kevin A Pena, Tyler E Trojan
Aqua Screen
Derek Ruth

Agostino Magnelli, Jackson W Smith, Harrison C Stanny, Claire V Widseth*
Peer Research
Derek Ruth

Josue A Campoverde, Fernando Lopez*
Soccer Prospects
Derek Ruth

Arturo Gonzalez*, Dennis O Handy, Esteban P Proano
Solar Boom
Derek Ruth

Joel Delgado, Trent T Hicks, Jorge A Velasco*
Safe Tech
Derek Ruth

10:30 a.m. | Chemistry

Alexis Simon, Lilian Gulyk, Jessica Tokarz, and Christopher Vazquez
Abilify
Daniela Andrei

Abilify© is an antipsychotic drug that is used to treat several mental disorders, such as schizophrenia, bipolar disorder, depression, and Tourette's syndrome. The drug is also known to be used in treating irritability that is related to autism. Abilify© targets several neurotransmitters, like dopamine and serotonin, either by inhibiting or enhancing them in order to improve the patient's symptoms. The common side effects of Abilify include weight gain, blurred vision, nausea, vomiting, changes in appetite, anxiety, restlessness, and insomnia. In this poster presentation, we will be discussing the chemical synthesis, medical applications, mechanism of action and the side effects of the drug.

Allison Monks, Joshua Nelson, Olivia Maj, and Estephania Lemus
Medical Applications of 2-octyl-cyanoacrylate
Daniela Andrei

Cyanoacrylate adhesives ($CH_2C(CN)CO_2$-R) are a class of organic compounds with a variety of commercial, personal, and medical uses. Characterized by a nitrile group (CN) with an associated ester group (R-CO_2-R), these biodegradable adhesives form bonds when applied to substrates through rapid polymerization in the presence of air and moisture or fixing agent. This class of compounds has been demonstrated as favorable to traditional suturing techniques in terms of efficacy and safety when repairing puncture and incisional medical and surgical wounds.

In this poster presentation we will discuss the applications of 2-octyl-cyanoacrylate as well as its usage in modern human and veterinary medicine.

Carlos Calderon
Chemistry of Clean: Synthesis of Soap
Daniela Andrei

It's not clear who first invented soap. There are documents suggesting that it was used by ancient Phoenicians over 5,000 years ago. Today, soap comes in many varieties and formsâ€"from bars, bottles, and boxes. The uses for soaps are just as expansiveâ€"from cleaning our hands, hair, and faces to a variety of household cleaning jobs, such as dishes or laundry. One thing all these different soaps have in common is their chemical origin; they were all made by mixing fat or oil with a strong basic solution, such as lye. In this poster presentation I will be presenting my lab work which covers the chemical steps needed to transform an oil into an usable bar of soap, purification of soap with salt in order to measure how its pH changes with its purity. Samples of soap will be also displayed with my poster.

Hannah Gordon, Sarah Odeh, Izamar Garza, and Brenda Perez
Vitamin D3
Daniela Andrei

Vitamin D3, also known as cholecalciferol, is a vitamin that is naturally produced by the skin when exposed to UVA and UVB rays. Cholecalciferol is essential in the absorption of calcium and phosphorus in the small intestines, as cholecalciferol is converted in the liver into calcidiol, the prohormone responsible for these actions. It is well researched that deficiency in vitamin D can lead to varying bone related diseases, such as Rickets in children and Osteomalacia in adults, but new research has provided evidence that vitamin D deficiency may have nonskeletal consequences, such as an increased risk in cardiovascular disease, adverse effects on young, developing brains, and possible pregnancy complications. In this poster, we plan to discuss the functions of vitamin D along with the effects of vitamin D deficiency.

Jennifer Medrano, Lisa Anyanele, Michaelle Moise, Carly Spears
Amphetamine
Daniela Andrei

Adderall is a moderately priced drug used to treat attention deficit hyperactivity disorder and narcolepsy. Adderall belongs to the amphetamine family; Amphetamine is one of the most potent sympathomimetic drugs. Amphetamine produces a wide range of dose-dependent behavioral changes, including increased arousal or wakefulness, anorexia, hyperactivity, perseverative movements, and, in particular, a state of pleasurable affect, elation, and euphoria. The different salts and beads are metabolized at different rates and is mainly metabolized in the liver and excreted through urine. Amphetamine produces its effects by increasing synaptic levels of the biogenic amines, dopamine, norepinephrine and serotonin,

through multiple mechanisms. In this poster, we will be discussing the effect this drug has on the brain and the body and the uses of it in today's society.

Leila Abuhadba, Jacob Collier, Danijela Aleksic, Areli Aragon
Tacrolimus
Daniela Andrei

Tacrolimus (FK-506 or Fujimycin) was first discovered in 1984 by fermentation broth of a Japanese soil sample that contained the bacterium Streptomyces tskukubaensis. Tacrolimus is an autoimmune suppressive drug that is mainly used in the treatment of patients who have undergone organ transplants to lower the risk of organ rejection. It is also used as an ointment in treatment of skin diseases or infections that are mediated by T-cells. Our poster presentation will discuss the synthesis, metabolism and side effects of Tacrolimus. In addition we will touch base on clinical trials that have shown positive results of using Tacrolimus, as a means of improving quality of life after organ transplantation.

Sebastian Lorenzo, Adam Creager, Cristian Delgado, and Justyna Natkaniec
Venom of king cobra: chemistry & human counter measures
Daniela Andrei

The king cobra is a very deadly snake with a very strong bite, known as the strongest bite of any venomous snake on earth. It produces massive amounts of venom and the fangs can deliver the venom in a large dose at one time. A bite from a king cobra can be fatal to a human being if left untreated. Bites from venomous snakes, including the king cobra, are still a big problem in many countries. In this poster presentation, we will be describing the chemical composition of the king cobra's venom, how the venom interacts in the human body and the body's counter measures in reaction with this venom.

Uriel Sanchez Molina, Benjamin Ibarra, and Austin Michals
Tramadol
Daniela Andrei

Tramadol (often branded as Ultram) is an opioid painkiller. In the US, it was first commercialized in 1995. Tramadol usually comes in the form of tablets and are generally taken orally. The FDA has stated that Tramadol is relatively safe, but like many opioids still carries a risk of addiction or psychological dependence. Generally speaking, the risks of Tramadol are relatively low compared to other opioid compounds. Our poster presentation will discuss the synthesis, side effects, and metabolism of Tramadol. Additionally, we will touch base on clinical trials that have shown either beneficial or adverse side effects of this opioid compound.

Alejandra Anguiano, Vanesa Mata, Samantha Graziano, Jhanvi Patel, and Mariah Gonzalez
The Role of Hyaluronic Acid in the Aging of the Human Epidermis
Alvaro Castillo Aguilar

Youthful skin is hydrated because it contains large amounts of hyaluronic acid in the epidermis where it gets synthesized by keratinocytes and fibroblasts and is responsible for the skin's moisture, tension, and resistance to mechanical stress. However, as we age, the amount of hyaluronic acid in the skin decreases and by the time we become adults, this amount decreases to about five percent. A study conducted by proDERM Institute for Applied Dermatological Research in Hamburg specifically on women of average age of 45.2 showed that skin hydration can be improved by up to 60% when a cream containing a high amount of hyaluronic acid was applied to the skin for an eight week period. This poster will focus on how hyaluronic acid assists in the hydration of the human epidermis.

Erika Kalita, Kamila Kalita, and Adrian Gubala
Green Synthesis of Ibuprofen
Alvaro Castillo Aguilar

The common practice of most chemical industries today is to generate huge volumes of product. A consequence of this practice is the generation of large quantities of waste and contaminants. A solution to this probe is to use green chemistry methods for the synthesis of commercial compounds. Green Chemistry is chemistry designed to reduce or dispose of hazardous substances produced during chemical reactions. The original synthesis process takes about six steps but results in large quantities of unwanted waste that is usually just disposed of right after the synthesis. A newly improved â€œgreenâ€ synthesis, developed by Boots Company and Hoeschst Celanese, uses hydrogen fluoride, Ra-Ni, and Pd catalysts. Remarkably, even though hydrogen fluoride is a hazardous reagent, there was less by-product and waste generated. This project will compare the original synthesis of the commercial drug Ibuprofen with more modern, and greener approaches.

Mohammed Alattas, Angela Espy, and Alexandra Rivera
Vitamin B6 deficiency and seizures
Alvaro Castillo Aguilar

Vitamin B6 serves many purposes in various systems in the body such as metabolism and the transformation of amino acids. Vitamin B6 also plays an important role in immune function and brain glucose regulation. Whole grain breads, meat, and nuts are some foods that contain vitamin B6 and most cases of vitamin B6 deficiency occur because of an inadequate diet. Seizures caused by Vitamin B6 deficiency are most common in newborns; however, some adults can experience Vitamin B6 deficient seizures due to poor diet, liver disease, and pregnancy. This project will discuss how Vitamin B6 can prevent seizures in infants and adults with deficiencies.

Noemi Hernandez and Lorena Juarez
Hemisynthesis of anticancer agents and some alternatives
Alvaro Castillo Aguilar

The synthesis of alternative compounds that mimic the effects of scarce natural products is called hemisynthesis. Podophyllotoxin and deoxypodophyllotoxin have been leading agents in the development of new anticancer drugs. Podophyllotoxin (PT) and deoxypodophyllotoxin (DPT) are naturally found in Podophyllum hexandrum and Anthriscus sylvestris respectively , however their extraction is becoming increasingly problematic due to its scarcity. Alternative sources are urgently needed. This presentation will explore various compounds that mimic the effects of podophyllotoxin and deoxypodophyllotoxin lignans and alternative synthesis of PT and DPT that can result in more cost-effective and environmentally friendly potential anticancer treatments.

Olivia Wilkins, Katrina Abarca, and Munirat Ogbara
Chemistry of Addiction
Alvaro Castillo Aguilar

Addiction is often explored on a psychological platform, the chemical changes that occur in the human body play significant, measurable changes. The impact drugs may have on a user depends greatly on the strength of binding and this is subject to a several variables, including the shape and positioning of functional groups, hydrogen bonding, salt bridges, p-stacking, p-cation interactions, hydrophobic contacts, conformational rigidity, and its ability to pass through hydrophobic blood-brain barrier. Addictive drug molecules possess similar structure as natural substrates and thus are able to bind to receptors, transporters, and enzyme active sites. Use of these drugs will result in physical and chemical changes in the brain that create long term efforts. This project will present how the brain changes and how an addiction is developed.

Yalitza Jimenez, Leslie Castillo, and Elizabeth Romero
Benefits of a Ketone Diet, a chemical perspective
Alvaro Castillo Aguilar

Ketosis is the metabolic state when the body uses predominantly ketones for energy, instead of carbohydrates or glucose. Primarily, the body uses carbohydrates as fuel. In the absence of carbohydrates, fats become the primary source of fuel, which allows the body to function using ketones. Individuals restricting their carbohydrate intake are said to be undergoing a ketone diet. The diet consists of few carbohydrates with high fat content foods for several weeks. The liver produces the compounds; acetoacetate, beta-hydroxybutyrate, and acetone which are used as an energy source when glucose is not available. The compounds are transported to other tissues of the body like the brain, muscle, and heart. Increasing ketone production provides the brain an alternative energy supply that enhances oxidative mitochondrial metabolism. The effects of following a ketone diet are associated with lowering blood sugar, promotes energy in individuals, as well as reducing seizures in epileptics. This project will highlight the benefits of following a ketone diet.

Mariam Gabriel and Chris Vazquez
Hydrothermal Synthesis of Boron Nitride Nanomaterials
Amartya Chakrabarti

Nanotechnology is an emerging field of science and technology that involves materials in nanoscale dimensions. They are generally used in a variety of applications including energy, space and medicines. Boron nitride-based nanomaterials come in many shapes including nanoparticles, nanotubes and nanosheets, and have many applications in preparing super hydrophobic surfaces, biomedical drug delivery, and neutron capture therapy. Boron nitride nanomaterials are prepared using different methodologies, such as, laser ablation technique, autoclave pyrolysis, and chemical vapor deposition. We are exploring a method of hydrothermal synthesis which is typically used to produce single crystals at elevated temperature and pressure. A hydrothermal reactor with suitable boron and nitrogen containing precursors will be employed to produce boron nitride nanomaterials. The products are going to be characterized via Fourier-transform (FT-IR) infrared spectroscopy to confirm the formation of boron nitride, while the product morphology and dimension of the nanomaterials will be obtained using scanning electron microscope (SEM).

Thy Ngo
Finding the Best Oxidation of Benzoin to Benzil
J. Brent Friesen

The oxidation of benzoin to benzil is a popular undergraduate Organic Chemistry laboratory experiment. This is usually accomplished with either nitric acid or copper(II) acetate. We explored alternative methods to benzoin oxidation that could be incorporated into the Organic Chemistry curriculum. Dozens of alcohol oxidation reagents are reported in the chemical literature. We tried potassium permanganate, hydrogen peroxide, and sodium hypochlorite (bleach) oxidizing agents. However, the most promising oxidation procedures featured â€œTEMPOâ€ with a co-oxidant such as sodium hypochlorite, calcium hypochlorite, or copper(I) bromide. Products were analyzed by thin layer chromatography, gas chromatography with flame ionization detection, infrared spectroscopy and nuclear magnetic spectroscopy.

11:30 a.m. | Biology, Physics, Psychology

Danielle Jones
Parasite prevalence and intensity observed in Ishnura verticalis damselflies
Christopher Anderson

The insect order Odonata, dragonflies and damselflies, are conspicuous members of the invertebrate communities neighboring streams and ponds. Odonates themselves, however, may harbor their own community of internal and external parasites. This project investigated patterns of parasite infection, prevalence and intensity of infection - of the Eastern Forktail damselfly (Ishnura verticalis) caught at a site in northern Illinois.

Between June 2017 and August 2017 we captured 100 Ishnura verticalis and inspected them for parasites. We recorded both mites, which were attached externally to individuals, and gregarines, which inhabited the midgut. Fifty-five percent of all individuals were infected with gregarines, while only 8% harbored mites. When infected, the median intensity of gregarines of damselflies was 4, with a maximum of 280 gregarines found in a heavily infected female. We investigated temporal patterns of infection, spatial patterns (across two ponds) and the influence of host sex and morphology on patterns of parasite infection. Parasitism in invertebrates is a common, but often overlooked, life history feature that may impact ecological communities. Futures studies could investigate the fitness effects of parasites on damselflies, e.g. impacts on host survival and reproduction.

Erica Rocha
Validating Technologies to Monitor Animal Behavior - STL Zoo
Christopher Anderson

One of the challenges in the field of animal behavior is that observing behavior is time intensive. New methods to score behavior automatically or more efficiently are desired. Technological tools may assist in scoring large amounts of data by removing the need for human observations. The St. Louis Zoo had the opportunity to use two technologies simultaneously in order to compare the results from the two data streams to a human observer. The technologies used were EthoVision, a video software program, and radio-frequency identification (RFID) which uses radio waves sent to an antenna. These tools monitored the movement and space usage of blue-gray tanager birds from Brookfield Zoo. The results from EthoVision and RFID were then used to determine the reliability for all observers.

Veronica Herrera and Jasmyn Hardin
Using the CO1 Gene to evaluate fish labeling accuracy
Irina Calin-Jageman

The objective of this experiment was to use DNA purification, PCR amplification followed by sequencing and bioinformatics analysis to determine accuracy in commercial fish species labeling. The fish that were used in this project were Tilapia and Perch. To determine if the fish were labeled correctly, we use the CO1 gene to compare both fish species. The CO1 gene (Cytochrome c oxidase subunit 1) is a conserved gene traditionally used for species identification and is considered the ideal gene for DNA barcoding in animal species.We used raw fish to purify genomic DNA and performed PCR reactions, using primers specified for the CO1 gene. We then purified the DNA and sent it out for sequencing. We compared our obtained sequences against known sequences on a nucleotide database site to determine if the labeling was correct.

Veronica Herrera
Efficient Gene Knockout in Goats Using CRISPR/Cas9 System
Margaret Jonah

My project is based on a review of a research article titled, Efficient Gene Knockout in Goats Using CRISPR/Cas 9 System. CRISPR are the hallmarks of a bacterial defense system that forms the basis for CRISPR-Cas 9 genome editing technology. Cas9 is an RNA-guided DNA endonuclease enzyme associated with the CRISPR adaptive immunity system in streptococcus pyogenes, among other bacteria. This research article focuses on the CRISPR/Cas9 measured approach that can successfully induce monoallelic and biallelic gene knockout in goat primary fibroblasts. Four specific genes were disrupted at the same time, and the result was successful: live-born goats containing biallelic mutations.

Jeanette Rojas
Investigation of K27 Synthesis - Cyclization of APNA with Diazonium Salt
Joseph Sagerer

In the summer of 2017 I did a Chemistry research internship at Fermilab in the scintillation detector development lab. My experiment focused on reaction III of K27 synthesis. Experiments reconfirmed issues related to recrystallization yield for this reaction. Recrystallization for this reaction used Dimethylformamide (DMF). DMF is an polar aprotic solvent with a boiling point of 153°C. There was an initial hesitation with using DMF as a recrystallizing solvent, however the product proved otherwise. Instead of recrystallizing the crude product, digestion was used as an alternative. The digestion of BXA with DMF produced a successful GC and HNMR analysis, upon further quantitative analysis the experiment was concluded to be successful.

Victor Roman and Angel Dominguez
An FPGA DAQ for Physics Experiments
Joseph Sagerer

We're developing a Field Programmable Gate Array (FPGA) based Data Acquisition (DAQ) System for use in particle physics detectors. The board takes four analog signals and converts them via on-board Analog to Digital Converters (ADC) into digital signals into the FPGA. Firmware on the FPGA discriminates based on signal size and logic between multiple signals. ADC values and signal waveforms are read out via USB.

Esmeralda Mariscal, Leslie Dominguez, Diana Suarez
The Effects of Mood on False Memory
Tracy Caldwell

False memory has been an area of intense research during the late twentieth and early twenty-first centuries. Stoberock and Clore (2005) conducted a study to see if there was an effect of mood on false memory. Participants were induced into a positive or negative mood condition with music. The neutral mood condition consisted of participants who began their recall task right after consenting, without listening to music. Participants who were in a positive mood were more likely to falsely recall stimuli that they were never exposed to than others who were in a negative or neutral mood. It was also found that there was essentially no difference in correct and incorrect recall across the three mood conditions. The present study is a replication of Stoberock and Clore (2005). One hundred and nineteen participants were gathered through SONA, and were randomly assigned to either a positive, neutral, or negative induced mood condition. After listening to mood inducing audio, they were randomly presented with six lists, containing fifteen words each. After each list was shown, participants recalled as many words as they could for forty-five seconds. As we hypothesized, those in the positive mood condition did falsely recall more stimuli than those in the other mood conditions. However, those who were in the negative induced mood condition did not recall less critical lures than neutral induced mood condition.

Leticia Perez
My Experience at Neuroscience 2017
Irina Calin-Jageman

This past fall semester I had the great opportunity to attend the Society for Neuroscience Annual National Conference held in Washington, DC. While at the conference I gave a talk about learning and memory research worked on while being part of Drs. Irina and Robert Calin-Jageman's Neuroscience Lab at Dominican University. In this presentation I will share my experience of giving this talk, attending the conference and exploring Washington, D.C. for the first time, and how this experience helped my professional skills grow. I will also explain how the ExcEL Scholars Award helped me pursue this experience.

12:30 p.m. | Accounting, Economics, Communication Arts and Sciences, Apparel Design & Merchandising, Internships

Monica Gonzalez and Ramiro Urquiza
Inconsistencies Concerning Revenue Recognition and the FASB Resolution
Khalid Razaki

Revenue recognition has been an area questioned by the Securities and Exchange Commission due to its frequent manipulation in financial statements. The problem starts with Generally Accepted Accounting Principles, which implemented a complex system that showed inconsistencies across different industries. Furthermore, it led to industries using different accounting principles when recognizing revenue for economically similar transactions. On May 28, 2014, the Financial Accounting Standards Board (FASB) and the International Accounting Standards Board (IASB) issued converged guidance on recognizing revenue to improve the complex system. This presentation will examine the research process used to properly apply the updated revenue recognition standards to a current manufacturing company. The research process consisted of exploring the history of the revenue recognition, and the changes made through the Accounting Standards Codifications. The research also addresses how the new guidance works on removing inconsistencies in existing revenue requirements, improves comparability of revenue recognition across all industries, and simplifies requirements needed to prepare financial statements.

Alec Coggins, Omar Alhumaidan, Lucero Luna, Daisy Pineda, and Jonathan Pulgarin
Regional Economic Profile: Africa
Kathleen Odell

Our International Economics course has provided us with the opportunity to study the economic conditions of Libya, Tunisia, Nigeria, South Africa, and Egypt in Africa. Our regional profile includes information about productivity, income, poverty rates, international trade, currency and exchange rates, and the balance of payments for Libya, Tunisia, Nigeria, South Africa, and Egypt. Our poster presents an overview of these measures within Africa, and provides commentary on how well (or not well) international trade theory describes global integration within the region.

Andrea Vazquez, Joseluis Ornelas, and Jesus M Martinez
Regional Economic Profile: South America
Kathleen Odell

Our International Economics course has provided us with the opportunity to study the economic conditions of Argentina, Brazil, and Columbia in the South American Region. Our regional profile includes information about productivity, income, poverty rates, international trade, currency and exchange rates, and the balance of payments for Argentina, Brazil, etc. Our poster presents an overview of these measures within South America and provides commentary on how well (or not well) international trade theory describes global integration within the region.

Angelika Stec, Ali Alfakher, Ismael Alvarado, Maciej Wojtasik
Regional Economic Profile: South Pacific Region
Kathleen Odell

Our International Economics course has provided us with the opportunity to study the economic conditions of four countries in the South Pacific Region. Our regional profile includes information about productivity, income, poverty rates, international trade, currency and exchange rates, and the balance of payments for Australia, New Zealand, Papua New Guinea and Indonesia. Our poster presents an overview of these measures within the South Pacific Region, and provides commentary on how well (or not well) international trade theory describes global integration within the region.

Anyi Tapiero, Era Doce, Mikolaj Konczewski, Ivon Guzman, and Nicole Mora
Regional Economic Profile: Europe
Kathleen Odell

Our International Economics course has provided us with the opportunity to study the economic conditions of 5 countries in the region of Europe. Our regional profile includes information about productivity, income, poverty rates, international trade, currency and exchange rates, and the balance of payments for Spain, Germany, United Kingdom, Sweden and France. Our poster presents an overview of these measures within the Europe, and provides commentary on how well (or not well) international trade theory describes global integration within the region.

Elizabeth Barahona, Raid S Almalki, Thabet J Alsaddah, Anthony Nasca, Manuel Corral
Regional Economic Profile: North and Central America
Kathleen Odell

Our International Economics course has provided us with the opportunity to study the economic conditions of 5 countries in North and Central American Region. Our regional profile includes information about productivity, income, poverty rates, international trade, currency and exchange rates, and the balance of payments for the United States, Canada, Honduras, Nicaragua, and Panama. Our poster presents an overview

of these measures within North and Central America, and provides commentary on how well (or not well) international trade theory describes global integration within the region.

Hussain A AlFakhr, Alejandro Chavez, Kyle S Miller-Davila, Stephanie Ramirez
Regional Economic Profile: Asia
Kathleen Odell

Our International Economics course has provided us with the opportunity to study the economic conditions of 5 countries in Asia. Our regional profile includes information about productivity, income, poverty rates, international trade, currency and exchange rates, and the balance of payments for China, India, Japan, Laos, and the United Arab Emirates. Our poster presents an overview of these measures within Asia, and provides commentary on how well (or not well) international trade theory describes global integration within the region.

Katarzyna Szwedo
Teaching the COMFORT Model of Palliative Care Communication in an Online Environment
Christine Platt

The goal of this project is to evaluate the effectiveness of training the COMFORT model in an online environment. After a literature review, an online pre- and post-test will be created based on COMFORT Palliative Care Communication training. Between tests, nursing students will complete an online learning module about family caregiver communication patterns, in accordance with materials developed by the Palliative Care Communication Institute. The unit is designed to assist care teams, providing the tools to improve communication with patients and their families. The project is a multi-disciplined, collaboration with the University of Memphis' Loewenburg School of Nursing and Department of Communication, Lambuth College, and Dominican University. Both the Communication Arts and Sciences Department and the School of Nursing at Dominican University will be involved in the project.

Kelly Dufort
Social Media and its Effects on Styling
Melissa Carr

Exploring the ways in which social media has evolved and its impact on fashion and styling. Social media has empowered consumers and gives them a platform in which they can share their views and opinions. It is especially important for retailers and stylists because they need to be aware of what their audience likes, and dislikes are. This allows a stylist to stay up to date on their demographics trends and styles. The presentation will include information and statistics regarding social media exposure and the various ways the fashion industry uses this information.

Amy Diaz-Hablich and Giselle Magana
The Art of Fair Trade
Melissa Carr

The goal of our project is to spread awareness of Fair Trade through collaborative dialogue within our community. What is Fair Trade? Why should you care? Fair Trade is about consumers understanding their ability of empowering and educating disadvantaged communities in developing countries with the decisions they make. By being informed of decent working conditions, fair terms of trade for workers and about local sustainability, we hope to create change to take measurable and ethical action. Our project was inspired by the personal story of Nasreen Sheikh, founder of Local Women Handicrafts, which is a fair trade textile and handicraft collective in Nepal. Her story allows us to see how one person can make an impact in our society.

Jacob Reed
Internship Experience at the Italian Trade Agency
Veena Carlson

A presentation and a summary of my overall internship experience as a Trade Analyst Assistant during the second semester of my sophomore year at the Italian Trade Agency. The Italian Trade Agency is a governmental agency, whose headquarters are based in Rome, where their main focus is to promote the trade and internationalization of Italian goods and services with other countries throughout the world. Through my internship, I assisted the agency with collecting research/data for the various trade shows that they are a part of, reaching out to businesses, translating from Italian to English and vice versa, making business-related phone calls, and other tasks the agency needed to have done.

Adam Eboli
Chicago Sand Volleyball Internship
Mark Carbonara

During the summer after my sophomore year, I had the opportunity to intern for a new startup company called Chicago Sand Volleyball. I pursued this internship because I am a volleyball player at Dominican, so I thought it would be very interesting to surround myself with the sport for a whole summer. I also pursued it because it was a new startup and it was working with boys sand volleyball; I thought it would be an amazing experience to see the business form from the inside, especially in the growing industry of sand volleyball within Illinois. I plan to speak about all my experiences with this opportunity, both positive and negative, and the skills I have learned that I will keep with me for my future business endeavors. I will also talk about how the ExcEL Scholarship made this entire experience possible for me in my academic journey.

1:30 p.m. | Art and Apparel Design & Merchandising

Aja Saverson
Kweenage
McKinley Johnson

The inspiration for my collection is based on traditional African garments but with a modern twist. The pieces are made to show the beauty of black women. Because black women have often times been overlooked, I wanted to make the collection an homage to them. To do this, I chose over-the-top fabrics and heavily hand beaded certain pieces of my collection to evoke royalty. My color choices are drawn from the African print fabrics I chose and the joy i wanted my garments to convey. Using purple and heavy gold - heavily associated with royalty, Kweenage is a collection that displays how beautiful black women really are.

Amy Diaz-Hablich
Paraíso Tropical
McKinley Johnson

Paraíso Tropical was inspired by tropical South America, a home to some of the world's most beautiful natural wonders. This collection was created to celebrate that richness and beauty. Each garment has clean style lines and a minimalistic balance between feminine and elegance. Through elaborate hand-embroidery, hand-sewn beading, bold fabrics, and bright colors, this collection conveys excitement and allows you to envision a world of tropical paradise we are not fortunate enough to see in our everyday lives.

Justin Suon
Extinction
McKinley Johnson

"Extinction" is based on my cultural heritage, which is presently endangered. I am Cambodian and my people were purged from their homeland. This political move has destroyed remnants and knowledge of my ancestral lineage. Through "Extinction", I have used color, texture and jewelry to personify the character of my people. It is my contemporary version of evolution in menswears, converting traditional Cambodian men's costume into men's fashions of now. I am paying respect to my people and making a marker in history. "Extinction" is alive.

Keely Cosgriff
A Brush Stroke. A Needle Stitch. An Artistic Collection
McKinley Johnson

I will be presenting my collection that was inspired by Taiwanese artist: James Jean. I wanted to interpret his artistic style into fashion and capture the spirit of his work while still having bits of myself in it. This includes pieces that have a custom fabric that was printed on sight at Dominican University from one of his iconic paintings. The embroidered flowers, decorative stitching, and fabric manipulations not only stay true to his paintings but also add a theatrical element. This fits into my future career goal to become a Costume Designer for theater and film.

Kristina Kuzmicki
Ritual
McKinley Johnson

My Senior Collection is entitled "Ritual". In "Ritual", I use water as my inspiration. Water is calming and helps to clear the mind. It flows, it takes on many shapes; it has a beginning and it has an ending. It can hypnotize you with its ebb and flow. When one looks at my collection I hope to give a sense of dream-like calm in a chaotic world. The use of fabrics such as satins, silks, chiffon, and organza, the smooth and shimmering quality of water is alluded to. By using soft and cool tones, a sense of calm drifts through the garments, causing a crash of waves with ruffled manipulations.

Maria Angjeli
Haute Immense
McKinley Johnson

My senior collection, "Haute Immense" is inspired by the Byzantine Empire. Using art found in Byzantine churches as my inspiration, I created elegant evening gowns based on paintings and architectural details of church ceilings, walls and floors. I believe my aesthetic keeps the history alive while evoking beauty and reverence. The color, texture and embroidery used on my gowns was produced by my own hands with the departments new exclusive embroidery machine. Fashion Design is an important foundation of life as is religion. Both help create a vision for people. I believe I bridged two worlds that at first might appear very dis-similar but upon a second look, fashion and the Sacred are very connected.

Patrick Owoc
Form Follows Function
Dave Pabellon

Inspired by biometric design, the act of designing through imitating nature, I utilized Physarum polycephalum, a brainless semi-intelligent slime mold for its beautiful and organic forms. Researchers have determined this organism is an expert at creating efficient paths from food source to food source. For my thesis, I have placed food sources, oats, in petri dishes in a way that mimics the points on letter forms. The mold has grown organically from these points and in doing so has created the 26 letters of the alphabet with its own mass. I have taken the data I received from this experiment and created posters that display this new font, a small take away book, and a case with artifacts of my process. Biological design has formed the world in which we live in. I want this project to bridge the gap between biology and graphic design to show that inspiration for design doesn't only come from traditional practices but can be from nature's own processes.

Guadalupe Juarez
Loops- The Process of a Brand
William Kerr

The project explains the process required to build prototypes for a developing clothing brand that reflects the artist's need for creativity. As well as to inspire the young adults of Chicago in the way that the message being conveyed is that if this young Chicago Artist can do it so can any other young adult of Chicago.

Parmer Atrium - Joint Reception URSCI Expo and the Global Learning Symposium

3:00 p.m. | End of Day Ceremony and Reception –
Friends & Family are welcome – Food & Drinks will be served

Announcements
2018 URSCI EXPO & GLS POSTER AWARD WINNERS
2018 UNDERGRADUATE SUMMER SCHOLAR PROGRAM (USSP) AWARDS
2018 Spring EXCELLENCE in EXPERIENTIAL LEARNING AWARDS (ExcEL)
Interim Provost and Vice President for Academic Affairs Jeffrey Carlson, PhD

Undergraduate Research Opportunities at Dominican University

The Office of Undergraduate Research, Scholarship and Creative Investigations (URSCI) builds upon the instruction in information literacy and research methods undergraduates receive through the core curriculum and the major field, and seeks to enhance the spirit and practice of inquiry occurring already across the curriculum. URSCI promotes undergraduate student-faculty collaborative research in all disciplines, offering students opportunities to engage in scholarly activities that go beyond regular class assignments, and administers a variety of initiatives to support undergraduate students involved in such scholarly projects. If you have questions about these opportunities, contact Marion Weedermann, PhD, Director of Undergraduate Research, Scholarship and Creative Investigations, at ursci@dom.edu.

Students can earn course credit for working with a faculty mentor on a research project or creative investigation that is completed independently—not as part of a class assignment. To learn more about special opportunities URSCI makes available to students, including the Undergraduate Research Support Award (URSA), the Undergraduate Research Assistantship Program (URAP), and the Undergraduate Summer Scholar Program (USSP), please visit http://www.dom.edu/academics/undergraduate-research

University Honors: Bachelor of Arts and Bachelor of Science

Through the Honors program, honors students can complete an honors project and non-honors students can complete a degree with distinction project in their major field.

Degree with Distinction Projects

The project leading to a degree of Bachelor of Arts or Bachelor of Science with Distinction in their major gives high-achieving students in their junior and senior years the opportunity to study independently and understand the nature of scholarship and creativity in a particular field. Generally, students attempting the Degree with Distinction begin working on the project in the first semester of their junior year. Students work closely with a first reader from their discipline who will help guide the project and recommend a second reader for the project; the director of the Distinction Project Process recommends the project to the Honors Committee for approval. The project is completed in the spring of the student's senior year.

Students must meet the following requirements to be eligible: junior status and a cumulative grade-point average of 3.30 in the field of the project and an overall grade-point average of 3.00. If the student's proposal is accepted, it is recommended that the student take ENGL 345 Advanced Academic Writing as a part of the project. Exemption from this requirement is possible at the discretion of the course instructor. Detailed deadlines as well as guides for writing a proposal and project guides for both students and faculty mentors are available in the Distinction Project Canvas Classroom, or from the directors of the Honors Program.

Honors Projects

Students in the Honors Program may elect to complete a Distinction Project or honors coursework leading to a bachelor's degree with university honors. The process for completing the project is the same as for the Degree with Distinction.

Global Learning Opportunities at Dominican University

The **Center for Global Peace through Commerce (CGPC)** offers programming that focuses on how social and business entrepreneurship can be a force for global good. The CGPC promotes internships in international economic development, corporate social responsibility and anti-poverty efforts. To learn more, visit http://www.dom.edu/admission/graduate/business-programs/center-global-peace-through-commerce.

The **Office for Community-based Learning (CBL)** allows students to engage in integrative cross-cultural learning experiences both within and across national borders through CBL courses, service-learning study abroad, organized service, and research that addresses community needs. To learn more, visit dom.edu/service or contact MaDonna Thelen, director, CBL.

Study Abroad encourages students to spend time outside U.S. borders in both faculty-led travel courses and semester or year programs in Latin America, Africa, Asia and Europe. To learn more, visit http://www.dom.edu/academics/studyabroad.

The **School of Information Studies**, which publishes the international online journal, World Libraries, prepares students to understand libraries as agents of local and global socio-economic development. The School of Professional and Continuing Studies' MA in Conflict Resolution is a one-of-a-kind, interdisciplinary program for those committed to working for peace and justice.

Excellence in Experiential Learning (ExcEL) Scholar Awards

The ExcEL Scholar Awards offer support to Dominican University students who have specific plans for study abroad, internships, research work, and other hands-on learning experiences and are seeking funds to bridge the gap between the cost of those experiences and their current financial means. Students are invited to apply for up to $2000 to fund study abroad, study away, or alternative break immersion program fees; stipends that cover living expenses for unpaid internships or research projects; travel-related expenses, or research project materials.

Since the launch of the program in the spring of 2016, 56 Scholar Awards have been given to Dominican University undergraduate students and we will be awarding several more students at the conclusion of the Expo and Symposium. Today, several of them—including Melissa Chavez, Shamia Clark, Era Doce, Alexis Kottoulas, Jasminum McMullen, Francesca Millare, Anusha Mody, Marina Moeller, Sara Odeh, Klaudia Perkowski, Saba (Ruhi) Raza, and Jessica Rock —are sharing the experiences they enjoyed with the help of the ExcEL Scholar Awards. If you are a student with hopes of pursuing your own research, internship, community-based learning, study away, or study abroad experience, please take advantage of the ExcEL Scholar Awards program to make those hopes a reality.

Acknowledgements

The Office of Undergraduate Research, Scholarship and Creative Investigations (URSCI) and the Academic Enrichment Center (AEC) would like to thank all of the faculty sponsors for their work with the undergraduate students participating in the URSCI Exposition and the Global Learning Symposium. The encouragement given to the students makes it possible for them to engage in inspired scholarly endeavors that take them beyond the classroom walls. We also express our appreciation to the session moderators for volunteering their time to make this exposition a success. A special thank you to all who volunteered as judges for our poster sessions.

We extend our gratitude to the faculty members who released their Parmer Hall classrooms for the day's presentations: Christopher Anderson, Rahel Bokretsion, Dinapoles Galvan, Guadalupe Hernandez, Margaret Jonah, Denise King, Jeanette Mokry, Yamunadevi Puraikalan, Emily Radlowski, Pliny Smith and Aaron Zerhusen. We appreciate your generosity and support of our efforts to promote student research, experiential learning and global engagement.

Thanks to Pete Peterson in the Office of Information Technology as well as Stephanie Kubas and Rebecka Lopez in the Office of Marketing and Communications, for their help in processing applications and preparing the URSCI and GLS program. We thank AEC Graphic Design Assistant Lupe Juarez and Dominique Watson for designing the event poster and other attractive promotional materials.

We thank Alison Healy, Academic Enrichment Center office manager, and Paul Simpson, Director of the Academic Enrichment Center, for sharing their expertise in the organization and their help in the organization of our event. Our appreciation also goes to Dave Carlson and K.C.Hovarka, Scheduling and Events Services, for their inestimable help in the event organization and set up, and to Claressa Padilla, Dominican University Dining Services Catering Director, for the day's refreshments. A special thank you to Maria Tiscarone for her time and assistance.

We would like to acknowledge Mickey Sweeney and Clodagh Weldon, Co-Chairs of the Mazzucchelli Scholars Honors Program, Anne Sullivan and Paul Simpson for all they do to support students in the honors program and/or pursuing degree with distinction projects.

We recognize the members of the URSCI subcommittee who give so generously of their time to ensure the continued excellence of URSCI initiatives: Dave Dolence, Molly Mansfield, Brooke Reavey, Joe Sagerer and Marion Weedermann (Chair).

Finally, tanks to Associate Provost David Krause, Interim Provost and Vice President for Academic Affairs Jeffrey Carlson and President Donna Carroll for their ongoing generous support of undergraduate research, scholarship and creative investigations and global learning initiatives at Dominican University.

For more information, please see the URSCI page at http://www.dom.edu/academics/undergraduate-research and the Academic Enrichment Center page at http://www.dom.edu/academics/aec.