

2017

Undergraduate Research, Scholarship and Creative
Investigations (URSCI) Exposition

&

Global ~~ENVIRONMENT~~

Global

PROGRAM OVERVIEW – MORNING

URSCI
108 Parmer Hall

URSCI
115 Parmer Hall

URSCI

PROGRAM OVERVIEW – AFTERNOON

| | URSCI 108 Parmer Hall | URSCI 115 Parmer Hall | URSCI 113 Parmer Hall | URSCI 107 Parmer Hall | Global Learning Symposium 109 Parmer Hall | Posters Parmer Atrium |
|-------|---|--------------------------------------|--------------------------|--------------------------|--|-----------------------------|
| 12:30 | Atzimba Rodriguez, Ahriel Fuller and Michael Ocampo RoundTable:Developinga coalitionamongpeopleof color | Legion Ivory and Alexis Kottoulas | | | | |

Degree with Distinction and Honors Projects included in the 2017 URSCI Expo

Carlos Bautista

Degree with Distinction and Honors Project: The Beauty of the

First

With a story that explores the relationship between a father and a daughter, this short film shows the perseverance and resilience of both the father, Mr. Luna, and his daughter, who he supports while she pursues her swimming dreams under uncertain circumstances.

11:30 a.m. | Ahriel Fuller

Colorism: The Divide between Black & Latin Americans in the US

Gema Ortega

Examining the historical and cultural context of Latin America in order to illuminate the current racial divide between Latin and Black Americans in the US, this project argues that centuries of racial construction and suspicion of dark skin in Latin America have contributed to the current colorism taking place between black and brown people in the US. To remove the stigma associated with black identity within Latin American culture, one must look at the history of blackness, colonialism, and mestizaje in Latin America as it contrasts with racial policies, identity constructions, and cultural practices in the U.S.

12:30 p.m. | Atzimba Rodriguez, Ahriel Fuller, Michael Ocampo

Round Table: Developing a coalition among people of color

Gema Ortega

Have you ever asked yourself why minorities fight against each other and not together? Is it prejudice or is

2:30 p.m. | Chandler Allen, Melinda Czifrak, Maria Dellanina, Rebecca Dent, Angelica Flores, Mayra Gaona, Nicole Ann Heiberger, Anna Kubik, Emily Lapinski, Valerie Mathes, Adilene Osnaya, Bailey Scianna, Mason Solbrig, and Gregory Vlassov

Justice through Learning: Mazzuchelli Honors & Christ the King building a community project

Michelle Sweeney

Mazzuchelli Honors students in the capacity of their Senior Seminar Project discuss what the Dominican campus and Honors program can do to make our three day summer workshop with high school students from Christ the King high school most effective.

BCTLE – 115 Parmer Hall

URSCI Oral Presentations

8:30 a.m. | Jacqueline Lara

Big picture and Big Ideas: How Self Transcendence and Time Horizons may influence Academic Performance.

Kathleen O'Connor

This presentation shares research on the influence of students' time horizons and the personality trait of self transcendence on student performance. This study included a diverse population of students enrolled in Summer and Fall Psychology courses at Triton College in River Forest, Illinois and Dominican University in River Forest, Illinois. ~~College Seminar~~

The present study tested two hypotheses. First, we hypothesized that, under stereotype threat conditions, Latino participants would perform the same as White participants when instructed by a Latino experimenter but less when instructed by a white experimenter, lending support to the protective power of similar ethnicity. Second, we hypothesized that this finding, if observed, would further be explained by ethnic identity strength, such that Latino participants who have a strong sense of ethnic identification would be more affected by stereotype threat. For these students, performance would be diminished after activation of negative stereotypes about Latinos by a white experimenter. Results revealed no statistically significant interaction between race of participant, race of experimenter, and ethnic identity strength. IRB#20151149

10:30 a.m. | Elizabeth Eaton | Degree with Distinction and Honors Project

Shall We Dance?

Jose Blanco

Delve into mid nineteenth century Siam and explore Rodgers and Hammerstein's masterpiece "The King and I." This project discusses the historical aspects of the musical and analyzes the process of designing costumes for the stage. Researching the history of the musical involves examining the tenuous political situation in Siam, the mystery of the real Anna Leonowens and a brief history of dress at the time. This research aided in designing costumes for major characters and the actual construction of two costumes, one of the King's robes, and Anna's ballgown. The presentation discusses the design and construction process and includes a demonstration of the garments.

11:30 a.m. | Anna Derkacz | Degree with Distinction and Honors Project

The Community of the Polish Student Leaders Assembly Leadership and Obstacles Surrounding Student Organizations

Michelle VanNatta

This project analyzes the development of the new Chicago based Polish Student Leaders Assembly (PSLA) which brings together the leadership in student Polish clubs around Chicago and universities and beyond. Since PSLA is an organization based on the unity of community, this paper discusses what makes a community and evaluates the demographics of Polish student organizations that join the community through a theoretical framework of social exchange theory and shared leadership. In the effort to bridge the obstacles caused by distance and scheduling, this presentation also analyzes the role of partially being an online community to the progress of the group, the generation gap that it is trying to bridge, as well as obstacles that are present in student organizations in general. Through a deep analysis of the problems, this paper also provides recommendations for student organizations in trying to attain better student involvement. At this stage, the organization is in the process of paperwork to incorporate as a not for profit 501(c)(3).

12:30 p.m. | Legion Ivory and Alexis Kottoulas

In Ore Clauso: An Experiment in Cross-Artistic Communication

Jeffrey Kelly

This project is a multi-work experiment challenging an artist's ability to bridge the gap between conflicting viewpoints within the Fine Arts. Two artists, one painter, one composer, will produce a series of works with absolutely no inspiration other than the work of the other artist. To ensure legitimacy, they will not speak to each other, but will instead allow their art to speak for them. The composer shall share an original piece with the painter, who will in turn produce a painting through her interpretation of the music alone, and share that work with him. The composer will then compose a new piece, share it, and the cycle continues. The artists must project their own perceptions into their and each other's work, while making the simultaneous effort to understand one another. In the end, neither will know how the other truly felt about any of the works until the project is complete.

1:30 p.m. | Angelica Flores | Degree with Distinction and Honors Project

Scattered Thoughts of a Small Girl: A Poetry Collection

Jennifer Stockdale

"Scattered Thoughts of a Small Girl" is a Poetry Collection that explores the themes of love, self exploration, childhood, friendships, and

| Angelica Flores

Dominican University's Marketing Literature: The Media Representation and Retention of Black Students

MaDonnaThelen

Mass media has a significant impact on the way people perceive themselves. These media portrayals impact the way people behave, work, interact, and develop their self esteem. This research project focuses on the media representation of Black students.

William George

Today, the Catholic Mass or Eucharist is looked upon by many young people as a very organized but also bland ritual. As the Church begins to develop a theology that would help bring these young people back to celebrate the Eucharist, it should be recalled

and also cover transportation costs to her internship with Hinsdale Bank and Trust. Throughout the presentation, the students will each share their experiences, what they gained from the experiences, and how they grew as young professionals.

2:30 p.m. | Adam Janusz

The Importance of Play

Josephine Sarvis

Research conducted on play in the classroom is growing in the field of education. Even so, the acceptance of play as a scientific topic at times stagnates because of its ambiguous definition. Rather than defining the act of playing as seeking enjoyment, taking part in sport, or representing a character within a production, play must be regarded as the conscious or subconscious authoring of abstractions and the experimentation of these abstractions. By proposing this narrowed definition of play, one derived from experience in the classroom and outside scholarly research, its advantages and their origins can be thoroughly identified. The advantages of abstract experimentation, or play, are based in neural evolution, learning, and meaning making. Play's implementation both in the classroom and beyond represents our largest hopes as learning creatures.

107 Parmer Hall

URSCI Oral Presentations

8:30 a.m. | Catherine Koziol | Honors Project

Genomic Annotation and Assembly of the Newly Isolated *Rhodococcus* Bacteria

Margaret Jonah

The purpose of this research has been to assemble and annotate the gene sequence of a bacterium isolated from coniferous forest soil near Lake Tahoe, California. Universal primers for 16S rRNA suggested in literature were tested and a forward and reverse primer pair was used to tentatively identify this bacterium as a species of *Rhodococcus*. Following this, the genome of this bacterium was sequenced.

9:30 a.m. | Aleksandra Wojtowicz, Bianca Mena, Elizabeth Sanchez and Raunel Urquiza

CommunityBasedResearchCitizenConcerns

MaDonnaThelen

Thispanelof SocialJusticeandCivicEngagementminororswill presentCommunityBasedResearchprojectstitled: "Mend the Millennial Voting 9:30

was modeled using molecular dynamics simulations. An ethanol- CN^+ potential energy function that takes into account the different ground and excited state charges and their shift as a function of the reaction coordinate was developed. These simulations provide a detailed microscopic picture of the influence of ethanol on the photodissociation process.

1:30 p.m. | Rebecca Kelm, Ivette Lechuga, and Nicolette Berrospi

Give a Little, Help a Lot

Tracy Jennings

This is a presentation of a "Textiles and the Environment" class project. Clothing waste hurts the environment by contributing to the overuse of resources, the overcrowding of landfills, and the degradation of some economies around the globe. Students will present how

awareness the garment will be presented at the spring fashion show. Our process and findings are also shown through a photo essay that illustrates an example of a circular economy of textiles. From our investigation we hope to gain greater insight into the textile industry, its waste on a local and global scale, and how we can implement environmental change.

2:30 p.m. | Students of the ELS Learning Center

Aarika Floyd

Learning Perspectives International Students in the United States

As global engagement becomes a more necessary and employable job skill in the 21st century, understanding and empathy for different cultures becomes an imperative for every young

Experiential Learning in Italy and South Africa

Patrick Homan and Jeffery Cote de Luna

As participants in study abroad programs in Rome, Italy and Stellenbosch, South Africa, we would like to share our insight and experiences with you as recipients of the ExcEL Scholar Award! We experienced nearly everything on our trips from days packed to the brim with several museums and hiking mountains to immersing ourselves in a completely different culture and eating delicious food. We are looking forward to sharing our experience with the community and hopefully assist others in their journey to accessing study abroad programs and the ExcEL scholarship opportunities at Dominican!

2:30 p.m. | Bruno Fernandez

International

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. Finally, 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

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PARMER ATRIUM

URSCI Poster Presentations

8:30 a.m. | Fine Arts

Arlet I.

Elizabeth Eaton

Heritage

McKinleyJohnson

This collection juxtaposes classic silhouettes with dazzling embroidery and daring fabrics, drawing eyes and making the wearer

This project travels through history explaining what, throughout the centuries, have influenced the British style. Within the project there are differences and similarities that emerge between British and American fashion. The project depicts these differences and similarities. This independent study was made possible by my experience in study abroad in London this past fall semester. During this time in London, independent research and personal experiences were collected and evaluated to depict these American and British fashion style trends. The project gives an overview of the history of fashion, then it dissects each century painting a vivid picture of those trending styles in that era as well as what those influences them.

Gabrielle Falona

A Ragged Fantasy

McKinley Johnson

A four piece collection of fantasy costumes inspired by classic fairy tales.

Sarah Tinoco

Veracity: A Brand Development of Modern Luxury Outerwear

Melissa Carr

Veracity: (ver ah city) is a modern, luxury outerwear brand envisioned over a semester's worth of comprehensive research and creative product and brand development in the apparel course, International Sourcing and Brand Development. The development of Veracity involved the learnings and simulated activities of market research,

McKinleyJohnson

My senior collection for apparel design is inspired by Roman architecture. During a study abroad trip, I was able to observe Renaissance and Baroque architecture of Roman churches. The facade of many of the churches had different pillars and plasters, which made it challenging to tell what was decorative and what was essential to the structure. This led me to design four garments that would challenge the audience in this way. My garments use fabric manipulation to create this type of illusion and different levels of fabric to purposefully confuse the audience.

Allison Bunag

Contrast

McKinleyJohnson

Contrast was inspired by traditional Chinese wear. The inspiration came from seeing Chinese paintings of royalty and stills of everyday life. The purpose of this collection was to take apart and tactfully transform Chinese traditional wear into something new and fresh. This was not a West meets East interpretation but a juxtaposition between tradition and now. Fashion has always had a fascination with moving forward and redesigning the past to now and Contrast shows that through the silhouettes, color choice, and construction. Chinese inspired design or fashions always echo the past but this collection rearranges the concept and presents something different.

Jacque Wallaert

Ethereal

McKinleyJohnson

Ethereal is the title of my 2017 collection. It is defined as extremely light and delicate in a way that seems almost perfect for this world. This definition was chosen in correlation with my inspiration and the mood the collection evokes. Inspiration is drawn from the ability of flowers to remain perfectly beautiful despite their many imperfections. Every garment is entirely constructed of remnant materials, vintage fabrics, scraps, and unwanted garments. The purpose is to raise awareness on the apparel industry's contribution to waste and pollution. It is also a great way to give forgotten fabrics a new life, one outside of a landfill. The ethereal collection is intended for the kind-hearted free spirit. It is a sustainable concept that evokes dainty femininity and an additional flare to the expected. Our planet keeps us alive, we must remember to show it our gratitude.

Amy Diaz Hablich

EBACreations:TheDevelopmenProcessof an Up cyclingBrand

MelissaCarr

BrandDevelopmentgoesfar beyondcreatinga functionalgoodor service.It

results show that both plant abundance and species richness increase with elevation. This suggests that climate change is causing more favorable conditions for plants in higher elevations. If lower elevations become less favorable, then more plants may shift upslope affecting the range and distribution of plants.

Crystal Castillo & Brianda Aguilar

and

The objective of this experiment is to determine commercial fish labeling accuracy. The work was based on a study done by

Brenda

11:30 a.m. | Chemistry

Ewelina Dwojak

The Prospective of Gene Therapy

Daniela Andrei

Gene therapy allows for the correction or replacement of defective genes that cause genetic disorders, cancer, and chronic infectious diseases. The use of physical and chemical approaches to transport a gene delivery vector into target cells with less harm is the future of this concept. Viral genomes were developed as a form of gene transfer along with recombinant DNA technology. The safety concerns of viral genomes arose and even though they were great at transducing cells, toxicity became a problem. The future obstacles include a better understanding of the

Biodiesel is an eco friendly alternative diesel fuel derived from vegetable oils. Biodiesel consists of methyl esters with long hydrocarbon chains called fatty acid methyl esters or

Jose Rangel

Prototype cosmic ray muon tracker

Joseph Sagerer

The objective of this project is to develop a multi-directional cosmic ray tracker which involves high voltage detector hardware along with data analysis to interpret the output. The detector being constructed makes use of light created when muons pass through scintillating material to reconstruct the paths of muons with the purpose of creating an image. The project is currently in the prototype stage as the focus is being dedicated to the calibration of the hardware. The current effort is going into data analytics to synchronize and optimize all the electrical components of the detector. The ultimate goal of the final project is to create a detector to scan through the walls of pyramids to discover hidden chambers.

12:30 p.m. | Psychology

Paulina Aguirre, Brett Barich, Kimberly Lopez, and Marbelin Molina

The relationship of gender and humor on attractiveness

Tina Ritzler

Prior research has shown that attractiveness is influenced by a variety of characteristics. One of these characteristics may be humor, but humor in potential partners varies according to gender. This study was carried out to see if humor and gender had an effect on attractiveness. This was conducted through humor and gender manipulations using the Desirability Scale (Durante, Li, & Haselton, 2008). This study was administered in a controlled setting where an online survey was completed by the students of Dominican University. The results demonstrated that gender and humor had no effect on attractiveness. Although this study did not find a significant effect, the results are consistent with previous research. The results of this study are as follows: $F(1, 118) = 0.004$, $p > 0.05$; $F(1, 118) = 0.224$, $p > 0.05$. Therefore, the results of this study do not support the hypothesis that gender and humor have an effect on attractiveness.

Kathleen O'Connor

The personality traits of grit and academic self-efficacy have an effect on level of academic achievement. Grit is the ability for a student to achieve a long-term academic goal if they have a great deal of persistence and commitment. Academic self-efficacy is the student's belief in themselves and their confidence that they can achieve a high academic goal. This study shows what the relationships between grit and academic achievement and academic self-efficacy and academic achievement mean. It does this by having participants, in this study Dominican University undergraduates over 18, take an online survey. This survey contained questions that coincided with each variable. The results of the survey this

to sample size, inability to randomly assign into groups, and limited time to collect data. Researchers will also discuss the shortcomings of the procedure, as well as what we have learned from the experience. Changes in procedures should be considered for future research, in addition to more research on awareness of a post test on the testing effect.

Jacqueline Lara

Big picture and Big Ideas: How Self Transcendence and Time Horizons may influence Academic Performance.

Kathleen O'Connor

This present research examined the influence of student's time horizons and the personality trait of self transcendence on student performance. This study included a diverse population of students (N = 95) enrolled in Summer and Fall Psychology courses at Triton College in River Forest, Illinois and Dominican University in River Forest, Illinois. Time Horizons and Self Transcendence was measured using a modified version of the Zimbardo Time Perspective Inventory (ZTPI; Zimbardo & Boyd, 1999). This study is based on previous work done in the exploration of future time perspective and self transcendence on academic achievement. This work is based on a study in which researchers measured self transcendence in college students and found students who identified a self transcendent purpose for learning spent more time on the boring tasks versus pleasurable tasks, and were later found to be less likely to drop out of college (Yeager et al., 2014). The researchers noted limitations regarding investigation of self regulation strategies. A better understanding of both constructs could help facilitate conversations with students in how to manage and create realistic future educational and broader life goals. The study anticipated a correlation

affect

Sean Korbas and

Jasmine Watson

How studying abroad changed my life

Rogelia Barra

My study abroad experience was life-changing. Studying abroad opened my eyes to different ways of life. The relaxed attitude of Spain encouraged me to take advantage of life and take chances. The people I was surrounded by were very positive and they embraced my background, which made me feel confident in myself. There were many aspects of my trip that influenced my future career goals. My professors and classes, my stay with a host family, my trips, and my application processes for both the Gilman and Excelsior Scholarships all impacted my life.

1:30 p.m. | Italian

Cory Griffin

Italian Trade Agency Internship

Veena Carlson

"Agenziaper la promozione all'estero e l'internazionalizzazione delle imprese italiane." The Italian Trade Agency is a government organization that promotes the internationalization of Italian companies. ITA provides information, support, and advice to Italian and foreign companies. I completed an internship in the Chicago office this spring. In this presentation, I will discuss what I was able to learn about some of these companies by collecting and organizing data. I spent much of my time at ITA helping in the editorial sector, where I was able to learn about several Italian publishers and agents.

2:30 p.m. | Nutrition

Shulamis Rouzaud

How to Grow a Plant Breeder and Researcher

Paul Simpson

My poster will showcase my internship with Spence Farm Foundation. This internship was made possible by the Excelsior Scholar Award. Spence Farm Foundation is an organization that educates food and healthcare professionals on the "hows" and "whys" of making our food system more sustainable. This is accomplished through immersive programming, such as Bread Camp, Chef Camp, and our Cookwell classes. As an intern, I

assist with the foundation's core programs and administrative functions. Specifically, I work on program development for Chef Camp and Bread Camp, writing blog posts on the connection between food, farm, and health, planning and implementing the annual Harvest Feast fundraiser, and searching for applicable research, including the science of marketing, and curriculum that are integrated into the educational programming. As a result of my experience, I plan on becoming a PhD, MPH, RD, and work as a plant breeder and researcher.

2:30 p.m. | Political Science

Amanda Ybarra

The Importance of Individual Perspectives in Crises: Genocide

Patrick Homan

This project in the format of a poster presentation is based on a long form essay on the necessity and impact of individual perspectives on the outcome of global crises. My work focused on Lt. Gen. Romeo Dallaire and his perspective as the UN Force Commander for the UN mission in Rwanda in 1994.

2:30 p.m. | Study Abroad

Vantayshia Knox

Semester in London: 20th and 21st Centuries Historical Dress Tutorial

Jose Blanco

This project is an overview of my experience studying abroad in London as an Apparel Merchandising student. With the supervision of Jose Blanco, a Dominican Apparel department faculty member, and Catherine Fuller, my overseas British mentor, I participated in a fashion tutorial furthering my understanding of the historic development of dress and fashion in the Twentieth and early Twenty-First centuries. Through visiting multiple museums and fashion exhibits in London along with independent research, I was also able to identify a h i s t o r y c o

Parmer Atrium Joint Reception URSCI Expo and the Global Learning Symposium

3:30 p.m. Announcement of 2017 URSCI Undergraduate Summer Scholarship Program (USSP) Awards and Excellence in Experiential Learning (ExcEL) Scholar Awards: RCAS Dean Jeffrey Carlson

Since the launch of the program in the spring of 2016, 33 Scholar Awards have been given to Dominican University undergraduate students and we will be awarding several more students this at the conclusion of the Expo and Symposium. Today, several of them – including Jazzine Acevedo, Jocelyn Cano, Faviola Cardenas, Elizabeth Eaton, DaRisha Heavens, Adam Janusz, Kelsey Keithly, Gillian Madden, Bianca Mena, Amanda Olszowka, Kelly Pompea, Shulamis Rouzaud, Esther Uriostegui, and Raunel Urquiza – 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 (URSC) 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 URSC 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. Besides the faculty sponsors who moderated their own student/ departmental oral and panel presentations, we would like to thank all of those who volunteered to help today.

We extend our gratitude to the faculty members who released their Parmer Hall classrooms for the day's presentations: Christopher Anderson, Alyssa Braun, Amartya Chakrabarti, Hippolyte Datte, Sophia Duffy, Brent Friesen, Christopher Galloway, Gerald Gulley, Derrick Hilton, Carsi Hughes, Margaret Jonah, Mariusz Kosla, Louis Scannicchio, Pliny Andrews Smith, Paula Sochacki, Aliza Steurer, Demirhan Tunc, Marion Weedermann, Nicolas Winter, and Aaron Zerhusen. We appreciate your generosity and support of our efforts in We

We would also like to recognize the members of the URSORCAS Committee who give so generously of their time to ensure the continued excellence of URSO initiatives: David Perry, URSO Chair, and faculty committee members Daniel Anderson, Jose Blanco, Anjali Chaudhry, Molly Mansfield, Janice Monti, Kathleen Mullaney, and Sara Quinn

Finally, we thank Rosary College of Arts and Sciences Dean Jeffrey Carlson, Associate Provost David Krause, Provost Jeffrey Breese, and President Donna Carroll for their ongoing generous support of Undergraduate Research, Scholarship, and Creative Investigations and Academic Enrichment Center initiatives at Dominican University.

For more information, please see the URSO page at