

2015 Presentation Schedule

12:00-1:30 pm - Krasa A

12:00-12:15 Brooke Bowman, Zachary Dawes, Rachel Johnson, Philip Kloc "Modeling Hospital Emergency Room Patient Flow in a Dynamic Model"

By using ExtendSim, we will model a Hospital's Emergency Room with an eye to optimizing doctor needs and minimizing costs while providing high quality service in a reasonable period of time. *Faculty sponsor: Deborah Cernauskas*

12:15-12:30 Joseph Baker, Brandon Clark, Kudret Kamberi, Ignatius Payne, Michael Silvestri "Process of an Insurance Claim"

Improving the insurance claim process. Our goal is to make the process as lean as possible. *Faculty sponsor: Deborah Cernauskas*

12:30-12:45 Morgan Bartlett, Cory Evans, Shannon O'Connell, Michael Ostrowski "The Griddle Riddle"

Working for an outside company, we were tasked with identifying the next big breakthrough in the foodservice industry. Focusing specifically on breakfast foods in the griddle category, we researched and analyzed emerging trends among consumers. This research revealed some interesting findings related to flavor trends, convenience, quality, and nutrition. *Faculty sponsor: Nona Jones*

12:45-1:00 Anthony Phipps

"Mytinerary: The App to Change the Travel Experience"

This presentation was developed as part of an Integrated Marketing Communications campaign. Mytinerary, the app to help you get the most out of your trips and cure your fear of missing out. Travel planning has never been as fun or simple, with personalized daily itineraries for you and your unique interests everywhere you go! *Faculty sponsor: Nona Jones*

1:00-1:15 Ashourrina Henshaw, Brennan Paul, Abdul Razick

"Efficient Intermodal"

We will present a more efficient way for our trucks to continue to get the most out of every driver. *Faculty sponsor: Deborah Cernauskas*

12:00-1:30 pm - Krasa Presentation Room

12:00-12:15 Briana Hamilton, Lucas Johnson

"The Portrayal of Men and Women: Sports Advertisements"

Women will be shown in their sport's environment considerably less than their male counterpart. We think women will be shown in a more revealing and sexual role (i.e., in a bikini) and partaking in activities that are not related to sports; while men will be shown as strong, physical specimen, who seem unstoppable and they will almost always be in a sports utopia. By sports utopia, we mean the perfect athlete: an attractive, 6'3 male, muscular and toned. *Faculty sponsor: Luigi Manca*

12:15-12:30 Stephanie Straka

"Sexualization of Men in Advertising"

Because of the increase in female empowerment advertising companies are starting to aim their ads to women. This then causes men to be sexualized for women buyers. *Faculty sponsor: Luigi Manca*

12:30-12:45 Sara Haque, Karly Sacco, Tatanisha Wooley

"Women's Skin Tones Within Beauty Advertisements"

How women's skin tones are portrayed throughout beauty advertisements. Lighter skin tones are considered more beautiful and are the ideal choice. *Faculty sponsor: Luigi Manca*

12:45-1:00 Nicholas Johnson, Jeffrey Mateo, Michael Rizzo, Michael Seery

"Images of Women in Athletic Advertisement"

How women are portrayed in athletic advertisements, as in advertisements where all women, not just athletes, are participating in physical activity. Physical activity can be defined as bodily movement that requires moderate energy and intensity. *Faculty sponsor: Luigi Manca*

1:00-1:15 Lauren Bartow, Reem Ibrahim

Lauren Bartow, Reem Ibrahim "Women Stereotypes in Magazine Advertisements"

We focus on the portrayals of women in popular contemporary magazines such as *Good Housekeeping*, *Elle, Cosmopolitan*, and *Glamour*, to show how the depiction of the stereotypes and cliche women roles are portrayed through the different bands of magazines. We will study the image of women that is sold through the magazines' advertisements as a means to sell products to consumers. By doing so, we will research the different aspects of how women are viewed in their cliched roles of society by the means of how the women are presented in the magazine advertisements. *Faculty sponsor: Luigi Manca*

1:30-3:00 pm - Krasa A

1:30-1:45 Elizabeth Lira, Kevin Pechnick

"National Tiger Sanctuary"

Google gave a grant for the National Tiger Sanctuary (<u>www.nationaltigersanctuary.org</u>), which houses endangered species and also works with rehabilitating various kinds of animals. The organization is located in Branson, MO, and the grant provides for free ad budget. This semester for the Business Institute two students are working directly on digital marketing research and ad campaigns for the National Tiger Sanctuary. Kevin Pechnick is focusing on benchmarking and user experience review of the site, and Elizabeth Lira has been learning Google Adwords and developing online ad and keyword ideas. *Faculty sponsor: Todd Kelsey*

1:45-2:00 Ayah Paras

"Religion, Religiosity, and Attitudes Towards People with Mental Illness"

The stigma against mental illness is a great hindrance in creating an environment where those with mental illness can improve their lives. Because religion can play a large part in a person's life, this study uncovers if adherence to certain religions have an effect on a person's attitudes towards those with mental illness. Perhaps we can find ways to lower this stigma against mental illness through religion. *Faculty sponsor: Brian Patterson*

2:00-2:15 Payal Shukla

"Healthcare Distribution and Disparities in Honduras"

My presentation will focus on the current situation regarding healthcare, its distribution, and problems associated with this process in the country of Honduras. I will use what I learned from my recent medical/public health mission trip experience to this nation to tie recurring themes and issues together and provide a stronger understanding to my audience. I will also propose solutions to the healthcare crisis happening in Honduras and neighboring nations who are in a similar situation. *Faculty sponsor: Tanya Crum*

2:15-2:30 Jazmine Acosta, Azka Khan, Hasan Rashid, Ellen Ryan

"Acoustic Properties of 3D Printed Seashells"

The main objective of this research is to 3D print seashells, and to analyze how the shape/size of the shell affects the acoustic properties of its cavity. We utilized a mathematical expression describing the surface of the shell, and generated numerous high-quality 3D prints of seashells with different parameters. We compared the acoustic features of 3D printed shells with the sound inside actual biological shells. We found that the engineered shell's cavities pick up low-frequency sound waves which are compatible with the "ocean sound" which one hears when he/she presses the shell against the ear. In the future, we plan to print higher quality shells and to obtain and compare accurate sound data from the various shapes and sizes of the printed shells. We plan to formulate a mathematical model, which would allow us to predict the acoustic properties of the shells as a function of their shape/size.

Faculty sponsor: Darya Aleinikava

2:30-2:45 Dana Cairns

"Phage Display Selection of a Linear Peptide for Binding to NeutrAvidin"

Through phage display selection, linear peptides were selected for binding to NeutrAvidin, a deglycosylated form of avidin which binds well to biotin and has a relatively neutral pH; these selected peptides can be used as affinity purification tags for protein purification in addition to other biotechnology applications. Previous research has identified a cyclic peptide, cyclic-DRASPY, which exhibits excellent binding to NeutrAvidin, and using a similar method, phage display was used for the selection of linear peptides which bind well to NeutrAvidin, where the initial library of linear peptides contained the DRASPY amino acid sequence in addition to eight randomized amino acid residues on the N-terminus of DRASPY. Peptides that performed well in competitions were synthesized via Solid Phase Peptide Synthesis (SPPS) and purified using HPLC; next, purified peptides were tested for direct binding to NeutrAvidin where they performed poorly when compared to the binding capability of biotin. *Faculty sponsor: Scott C. Meyer*

1:30-3:00 pm - Krasa Presentation Room

1:30-1:45 Lynzi Misuraca, Tara Tarazoff, Joe Ward

"The Traditional Contemporary Family"

The subject of our research is the representation of the contemporary family in magazine advertising. We will examine advertisements that portray a mother, father, and their children to see how the family is seen throughout advertising world. Second, there must be a reason the family is grouped together, and why they are participating in the activities shown. Our magazines will include the Diocese of Joliet monthly magazine, along with *General Housekeeping*, and other family-oriented magazines. *Faculty sponsor: Luigi Manca*

1:45-2:00 Remir Shehu

"Gender Narratives in Advertisement"

Gender is the social construct that identifies a particular individual as belonging to a particular gender. This is different from sex which denotes a biological identification of the individual. The goal of this research is to identify which gender narratives (i.e., weakness, bravery, fear etc.) are relegated to which gender and examine whether these narratives are beneficial or harmful to gender identity as a whole. *Faculty sponsor: Luigi Manca*

2:00-2:15 Ruby Melgoza

"The Portrayal of African and Latin Women in Contemporary Mainstream Magazine Advertisement"

Thesis: We live in racial America where boundaries experienced by Latin and African minority women are portrayed in mainstream magazine ads. Rather than creating a wide range of advertisements that portray the cultural values of such minority women, we disguise the white American values in ads with Latin and African women so as to not conform to their cultural ideals. *Faculty sponsor: Luigi Manca*

2:15-2:30 Amber Johnson

"The Portrayal of Utopian Spaces in Magazine Advertisements: Men within the family in the absence of adult women"

Although this research replicates Dr. Manca's study, I have found several different characteristics of how men are portrayed with their family. This study will show that in many cases, gender characteristics transcend the social norm of what is expected to be natural. Therefore, in this study, I will show that as the age groups between both boys and girls broaden, the ads are aimed toward individuality. *Faculty sponsor: Luigi Manca*

2:30-2:45 Reanna Bisharat, Leah Noel, Vanessa Salazar

"Sexualization of Women in Alcohol Advertisement from the 1980s to Modern Day"

We discuss how women have been portrayed more sexually from the 1980s to the modern day in alcohol advertising. Faculty sponsor: Luigi Manca

3:00-4:30 pm - Krasa A

3:00-3:15 Sarah Jaber

"Medical Humanities in Action"

Medical Humanities is an emerging field that strives to integrate the humanities and healthcare starting from the undergraduate level to informing medical practice after medical school. By understanding

cultural and psychological components that affect the doctor-patient relationship, physicians can better deliver care that addresses all parts of the individual. With the integration of sociocultural aspects and the influence of multiple disciplines, medical humanities serves as the step towards ensuring humanized and holistic care to diverse populations of people, including refugee populations. *Faculty sponsor: Jean-Marie Kauth*

3:15-3:30 Malak Hamdan, Antoinette White

"Exploitation of Minorities: Past and Present"

The continual exploitation of the Guatemalan indigenous people by their government led to an uprising and eventual civil war. This war resulted in a genocide of the indigenous, as well as an eventual diminution and repression of their culture. Currently, we continue to see exploitation of indigenous ethnic minorities such as the conflict between the Han majority and several minorities in China. *Faculty sponsor: Jack Thornburg*

3:30-3:55 Meagan Donner, Zubair Farooqui, Baasma Khan <u>Panel</u>: Pesticides and Human Exposure *Faculty sponsor: Jean-Marie Kauth*

Meagan Donner: "Relationship between Pesticide Exposure and Cancer, Specifically Childhood Leukemia"

While pesticides may be helpful in preventing the destruction of crops and protecting plants, there are many health risks associated with these chemicals. Pesticides have many different carcinogenic properties. Leukemia is the most common form of childhood cancer in the world and it has been linked to pesticide exposure, for example, acute lymphoblastic leukemia (ALL) and acute myeloid leukemia (AML). The correlation between pesticide exposure of children and risk of developing leukemia as a result of this exposure will be explored, in addition to a discussion of current studies being done and where there is a need for more research.

Zubair Farooqui: "Is the degree of harm from pesticide exposure sex-linked?"

The purpose of the research is to observe whether there is a relationship between a person's gender and pesticide exposure. It will be researched whether a person is harmed more from pesticide exposure because of gender.

Baasma Khan: "Prenatal Exposure to Pesticides and the Negative Effects on Children"

Prenatal exposure to a variety of pesticides has proven to be detrimental to the neurodevelopment of children. Researchers have sampled pesticides levels through urinary/umbilical cord serum to determine pesticide levels in pregnant mothers. After the child is born, they monitor children through continual checkups using different intelligence scales to see how their neurodevelopment has been affected.

3:55-4:10 Tyler Polanski

"Quantification of Chromatophore Density in the Cichlid Fish Astotilapia burtoni"

In fish and amphibians, the melanocortin peptide α -melanocyte stimulating hormone (α -MSH) is known to disperse the pigments in the skin melanocytes by activating the mc1r receptor. In the cichlid fish *Astatotilapia burtoni* males are either yellow or blue. In this species, a-MSH disperses the pigments of the yellow xanthophores, increasing yellow body coloration in blue males. To obtain a better understanding of body pigmentation in *A. burtoni*, I quantified the density of pigment-containing skin cells in *A. burtoni* scales.

Faculty sponsor: Peter Dijkstra

4:30-5:30 pm - Krasa A

4:30-4:45 Michael Ostrowski

"Integrated Marketing Communications Campaign for Not-Your-Average Joe Coffee"

This presentation focuses on the Integrated Marketing Campaign for Step Right Up Nutrition and their flagship product, "Not-Your-Average Joe," the world's first pre-workout coffee. Focusing specifically on the sports nutrition Industry, "Not-Your-Average Joe" aims to penetrate the market with its unique flavor, natural ingredients, and gender-neutral advertising. *Faculty sponsor: Nona Jones*

4:45-5:00 John Dodson, III

"Integrated Marketing Communication Campaign for FastFeet"

An Integrated Marketing Communication (IMC) campaign was developed for GetFit Inc., a fitness equipment company created by John Dodson III. This presentation will highlight the competitor, customer, and other analyses conducted to aid in the unique positioning of the company and the products it offers. The various components of the campaign, including development of the name and logo, originally designed advertising and promotion, and distribution and media plans will also be highlighted.

Faculty sponsor: Nona Jones

5:00-5:15 Alexandra Cascone

"Sophisticated Style: The Ultimate Wardrobe Solution for the Professional Woman"

An integrated marketing communications plan was created for an original line of clothing for professional women. Sophisticated Style provides an avenue of expression and offers a wide variety of suits, blouses, skirts, dresses, and accessories designed to offer a complete professional look. In addition, there are various promotional items created to build awareness of Sophisticated Style and to promote the development of professional women, including connecting them worldwide. *Faculty sponsor: Nona Jones*

5:15-5:30 Diya Esters, Zack Pacourek, Uamar Syed

"Food Advertising Caters to Gender Stereotypes"

We will discuss how food advertising uses gender stereotyping to persuade the consumer to believe that a food product will help them to relate more with their gender. *Faculty sponsor: Luigi Manca*

4:30-5:30 pm - Krasa Presentation Room

4:30-4:45 Nasiha Asadullah

"The Effects of Social Turmoil on Aggressive Behavior and Testosterone Levels. A Social Network Approach"

Organisms often form social networks, or non-random interactions amongst members of a group. In this study we integrated both social network analysis and hormone sampling (for measurement of cortisol and testosterone) to test whether dyadic interactions are correlated with hormone levels in replicate communities of the highly social African cichlid fish, *Astatotilapia burtoni*. Hormone samples were taken after a social manipulation consisting of removing a dominant male to determine whether the resulting social disruption causes changes in behavior and hormone levels in community members. *Faculty sponsor: Peter Dijkstra*

4:45-5:00 Jessica Nelson, Ann Pendergast

"Effect of MTII on Pigment Dispersion in Kenyi Cichilids"

The aim of this project is to test the effect of MTII, a melanocortin agonist, on the yellow pigmentcontaining xanthophores on the scales of the East African cichlid fish Pseudotropheus lombardoi. The scales were removed from the cichlids and perfused with different concentrations of MTII to test whether the pigments within the xanthophores dispersed according to the concentration. The information from this project can be used to identify Pseudotropheus lombardoi as a model organism for the study of the melanocortin system and to test whether our model species can be compared physiologically to other cichlid species.

Faculty sponsor: Peter Dijkstra

5:00-5:15 Joanna Pilipczuk

"Organiphosphates vs. Pyrethroids"

Organophosphates and pyrethroids are both pesticides that are high in toxicity. Research has shown that pesticides have increased the risk of autism, but there is little research indicating which pesticides have a more detrimental effect. I am proposing to perform further research that examines which type of pesticide is more closely correlated with autism. Faculty sponsor: Jean-Marie Kauth

5:15-5:30 **Rachel Warren**

"The Effectiveness of Animated Films in Conveying Environmental Messages"

Throughout film history, animated films have proven to be an effective means to positively influence the general public's perceptions and actions towards the environment. Through the way animated films such as Disney's Bambi and James Cameron's Avatar have animated nature and given its inhabitants human-like characteristics, not only does the public view nature in a way they had never previously done, but becomes empathetic towards nature as they are able to observe and reflect on the impacts of their own actions.

Faculty sponsor: Jean-Marie Kauth