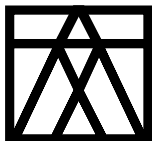


AZARIAN MCCULLOUGH ART GALLERY

St. Thomas Aquinas College
Costello Hall Room 110
125 Route 340
Sparkill, NY 10976

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AZARIAN MCCULLOUGH
ART GALLERY



IGNITE

**ST. THOMAS AQUINAS COLLEGE
4th ANNUAL ART, DESIGN &
SCHOLARSHIP EXHIBITION**



Ignite your curiosity. Ignite your imagination.

Welcome to Ignite: St. Thomas Aquinas College's fourth annual Art, Design, and Scholarship Exhibition. Ignite is a celebration of our undergraduate students, their research, and their creativity from multiple disciplines across campus. The scope of the presentations featured showcase the outstanding caliber of our undergraduate students at St. Thomas Aquinas College. We hope that this exhibition will ignite a passion for discovery and ingenuity in all of our students for years to come.

The projects on display also demonstrate the ongoing commitment of our faculty to supporting undergraduate research. As is true of their faculty mentors, these students and their work hold the potential to contribute positively to the world. Each of these students has benefitted from guidance provided by exceptional faculty. We thank the faculty for their efforts on behalf of these students.

We strongly encourage you to share in this showcase -- visit the poster presentations, view exhibits on display in our gallery, and read the collection of abstracts included in this program.

Organized and curated by

Nina Bellisio
Assistant Dean, School of
Arts and Sciences
Associate Professor of
Visual Communications

Ethan Finkelstein
Adjunct Professor of
Visual Communications

Craig Martin
Professor
of Religious Studies

Ryan Wynne
Director, Honors Program
Professor of Biology

IGNITE: 4th ANNUAL ART, DESIGN & SCHOLARSHIP EXHIBITION

**April 21- May 10,
2019**

O'Say Can You See? How American Nationalism Affects Racial Attitudes

Ashlee Joseph

Faculty Mentor: Dr. Benjamin Wagner, Assistant Professor
of Psychology

Existing literature has connected conservative attitudes with negative attitudes toward racial minorities and has shown that conservative attitudes increased when participants were exposed to the American flag. In this study, participants have been exposed to the American flag, the United Nations flag, and a college emblem to prime various group identities. It was hypothesized that participants who were exposed to the American flag would express more negative attitudes toward Black Americans. We also hypothesized that the American flag would increase politically conservative attitudes among participants. Results have not fully supported our hypotheses. We found that the American flag has not made participants more conservative nor has an effect on most racial attitudes. Racial differences have been observed.

Swarms and Group Theory

Isabella Diaz

Faculty Mentor: Meghan De Witt, Assistant Professor of
Mathematics

Group theory is used to describe and predict countless events and swarms will be the next. Many of these biological groups exhibit behaviors that may be able to be connected by guidelines of algebraic group theory. These behaviors include a maximum and minimum distance between group members and a collective between them, such as direction of movement. These behaviors are currently being researched using differential equations. However, we believe that we are the first to study them using group theory. We investigate the group-like structure of swarms and seek to develop how these structures work with

each other by taking advantage of the similarity to groups. The symmetrical tendencies behavioral patterns exhibit will be crucial in understanding the way swarms operate. Swarms often depend of environmental conditions and mate recognition with the largest density of individuals concentrated in the center of the swarm according to a 2009 study by Manoukis et. al.

The Effective Use of Advertising Appeals; Emotional, Rational and the New Era of Shaming

John McNamara

Faculty Mentor: Dr. Deirdre-Noel Engels, Associate Professor of Marketing

The Institute of Practitioners in Advertising (IPA) conducted a study comparing the effectiveness of rational, fact-based advertising appeals with emotional advertising appeals. The study concluded that ads with emotional appeals performed twice as well as ads with fact-based messages. Researchers concluded that the higher performance was due to the ability of the human brain to process emotions better and that emotions are noted to improve recall and memory. Our study will further test this theory in the area of societal oriented products (i.e. products that give a percentage of profits back to society). We will also incorporate a third variable which will employ a more heavy handed guilt message, which we call the “shaming appeal”. This idea of a third harsher message structure was born from the recent trend in advertising arising from the desire of a brand (i.e. Gillette) to capitalize and align themselves with a social movement and take a stand to promote social change. Our hypothesis is that the “emotional” message appeal will generate higher scores on purchase intent than both the fact-based “rational” and guilt-based “shaming” appeal. Data will be gathered via an online survey containing three discrete visual ads, each will contain one of the three advertising messages described above. We will also test whether the resulting purchase intent scores vary by gender and age.

The Effects of Being a College Athlete on the Experience of Emerging Adulthood

Elias E. Guardado

Faculty Mentor: Dr. Richard F. Heath, Professor of Psychology

Emerging Adulthood is a stage hypothesized by the psychologist Jeffrey Arnett (2000). This stage is considered to be the transition between adolescence and young adulthood, beginning to occur around the age of 18 and lasting until about age 25. There are five key features that define the core issues of emerging adulthood: identity exploration, instability, self-focus, feeling in-between, and an age of possibilities. Past research on emerging adulthood has generally investigated effects such as age, socioeconomic status, ethnicity,

and educational differences. This current study will explore the differences in emerging adulthood characteristics between college athletes and non-athletes using a modified version of the Views of Life Survey (Reifman, Arnett, & Colwell, 2007), which measure emerging adulthood traits. It is hypothesized that athletes will express stronger degrees of emerging adulthood traits, since their college experiences of increased freedom, contrasted with athletic experiences of more demands by adult authorities, may increase the conflicts that fuel this stage's issues.

Utilizing Experiential Learning to Develop and Enhance Business School Curriculum: A Reflection of the 2019 IACBE Student Case Study Competition

Alex Bruzzi, Isabella Diaz, Nicole Amerling, Cameron Pashley, Kerry Conlon, Frank Schiavone, Caroline Parahus, Emily Ferretti

Faculty Mentor: Dr. Christine Cahill, Associate Professor of Business Administration

Experiential learning at STAC connects our experiences with our curriculum and enhances our liberal arts and business education. In the IACBE team experience, we seek to give STAC students a collaborative academic experience by building a case study team and analyzing a current business. The IACBE Case Study Competition team has competed at the IACBE conference for the past 7 years. Prof. Cahill will share insights about building these experiences and mentoring students so that they result in significant educational value. The 2019 team will present their findings and reflect on their experience.

Impact of Federal Reserve's Normalization on Variance and Mean in Emerging Market Economies

Kathleen Howell

Faculty Mentor: Dr. Rossen Trendafilov, Associate Professor of Finance

Following the 2008 recession, the United States economy faced a sharp decline in interest rates coupled with an increase in dollar denominated debt. This debt was primarily being borrowed by emerging market economies (EMEs) who took advantage of the low cost of borrowing and it eventually amounted to about \$12 trillion in outstanding US debt today. In late 2014, the Federal Reserve announced a future policy of normalization; they would be increasing interest rates and reducing their own security holdings. While this was intended to return the domestic economy back to "normal" times, it had potentially adverse effects on EMEs. With a rise in interest rates, dollar denominated debt became more difficult to pay. In this paper, I perform an event study for three main channels of data: five-year bond yields, market indices, and foreign exchange rates of five different emerging markets, including Brazil, Poland,

China, Philippines, and South Africa. Utilizing abnormal returns, variance, and mean, a series of t-tests and f-tests show that on days that the Federal Reserve announces a rate increase and diminished security holdings, EME's face increased volatility.

Relationship between Capacity Utilization and Inflation Becomes More Evident

Isabella Diaz, Alexander Bruzzi, Nicki LiTrenta

Faculty Mentors: Dr. Meghan Mihal, Associate Professor of Economics & Dr. Rossen Trendafilov, Associate Professor of Finance

Prior to the early 2000s, researchers did not find a causal relationship between capacity utilization and inflation; however, we see evidence to support that this has changed: a relationship does exist between capacity utilization and inflation. Recently, major corporations are choosing to increase their capacity utilization, rather than increase wages, as current theory would suggest when the economy is at or near full-employment levels. We argue why capacity utilization should be considered a leading indicator for inflation and how the relationship is direct. We test this hypothesis through regression analysis and we find that the correlations between capacity utilization and various measures of inflation further explain and verify this relationship regarding capacity utilization as a determinant of inflation.

Optimization of a Water-Borne Hormone Extraction Protocol for Measuring Cortisol in Zebrafish

Devin Beckmann, Joshua Gonzalez, Elias Guardado, Robert Hornberger, Saqlain Javed, Brandon Polichetti, Andrea Solimando, Natalia Swiecki

Faculty Mentor: Dr. Ryan Wynne, Professor of Biology

Zebrafish (*Danio rerio*) are used as a model organism in a wide range of studies for vertebrate biology, physiology, human disease, and behavior. One such behavior studied extensively in zebrafish is known as shoal choice behavior. Shoaling refers to a social aggregation of fish. Shoaling is an adaptive mechanism; it is a form of socialization that reduces the risk of predation, while increasing the chances of mating and obtaining resources for survival. The molecular mechanisms influencing such aggregation behaviors remain unclear. The expression of the stress hormone cortisol has been suggested, as social contact, or lack thereof, is often associated with the stress response. We are currently using a noninvasive water-borne hormone extraction protocol, and enzyme immunoassays to determine how real-time shoal choice behaviors correlate with cortisol expression. In the present study, we attempt to optimize this hormone extraction protocol for zebrafish to reliably isolate and measure cortisol from fish interacting with various sized shoals. Ultimately, our goal is

to utilize this protocol with zebrafish to determine if the expression of social behavior is related to differences in cortisol levels.

Researching the Effects of Meditation and Therapeutic Art on Depression, Anxiety, Pain, and Stress in Residents with Early-Onset Alzheimer's Disease

Ashley McGovern, Samantha Rozo, Alexis Rubenstein, Izzy Watts, Nicole Wagner

Faculty Mentor: Dr. Levine Madori, Professor of Therapeutic Recreation

This research study in therapeutic recreation was done with seniors living in an assisted living under the supervision of Dr. Levine Madori at the Promenade facility in Pearl River, New York. A meditation and themed therapeutic program was conducted for 60 to 90 minutes once a week. Self-selected patients with the diagnosis of mild Alzheimer's disease attend the group by personal choice. Attendees participated in pre-post data collection measuring their depression, anxiety, pain and stress (DAPS). The patients chosen to complete the DAPS were given a pre-test before the meditation and a post-test right after the meditation. The quantitative and quantitative results showed that following the mediation the patients reported significantly lower depression, anxiety, pain and stress scores. This study demonstrates that regardless of the cognitive functioning level, meditation can be a powerful, non-pharmacological treatment for those who want to address their depression, anxiety, pain, and/or stress levels.

Studying Smartphone Addiction in 18-to 25-year-olds

Isabella Szklany

Faculty Mentor: Professor Elaine Winship, Instructor of Communication Arts

According to the Pew Research Center, ninety-five percent of Americans own a cellular device, with seventy-seven percent owning a smartphone. Whether they are used for making phone calls, viewing social media posts, or streaming entertainment, smartphones represent both a primary connection to the world around us and a primary conduit for communication, information, and entertainment. This combination of features and functionality can make it increasingly difficult for individuals to consciously disconnect. It is through this lens that I pose the following questions: When does smartphone usage become dependence? When does dependence evolve into addiction? And how does smartphone addiction affect the 18-to 25-year-old demographic? This research will be narrowed to specifically focus on the mental health impact of smartphone addiction. Reading scholarly articles and completing a twenty-four-hour media fast will provide the basis for understanding why young adults become enslaved to their mobile devices, while the entire project will be conducted over the next four years. In total, this research will help us

understand why smartphones are so pervasive and why we should explore measures to minimize or prevent smartphone addiction among young adults.

Oncology Histology Biomarker Lab Internship

Katherine Kucz waj

Faculty Mentor: Dr. Clara Toth, Professor of Biology

When learning how to stain tissues, H&E is the most common and easy stain to perform in the lab. All of the other stains are done on a machine. Almost all the the antibodies used during staining, due to being a histology lab, are to mark T cell infiltration. There are many different antibodies that attach to different receptors on the cell. Some antibodies are great for one type of cell while horrible on another. These antibodies are often trying to target only one specific type of cell to answer one specific question.

The Economics of Poverty in the United States

Nicole Amerling

Faculty Mentor: Dr. Rossen Trendafilov, Associate Professor of Finance

In a nation that is notoriously wealthy and is full of opportunity and industry, there has been has been a rise in poverty and inequality. The United States is currently experiencing a period of economic growth that is accompanied by a growth in inequality. By exploring and comparing data from the Gini Index, income distribution models in the United States, World income distributions and poverty gaps, we can interpret recent trends to gain insight on the magnitude of this issue. It is imperative to ask the following questions: how does the current position of the United States compare to other developed nations? How does it compare to developing ones? Why is a developed country seeing a fall in life expectancy and what does that mean? This rise in poverty and inequality may be due to existing economic policies in place in the United States coinciding with rising health and living costs. The issue of poverty in the United States is not one that is new, however it is one that is on the rise and it seems as if a blind eye has been turned to the scope of poverty that this nation sees within its own borders.

Stock Market Prices Do Not Follow Random Walks...or Do They?: Testing the Efficient Market Hypothesis & Alternatives

Silvana Molinas

Faculty Mentor: Dr. Rossen Trendafilov, Associate Professor of Finance

Is it possible to beat the market? Most economists would respond with a resounding no, markets are mostly efficient, meaning that stock prices accurately reflect all information about a stock, which, depending on the type of

market efficiency, means that no one can have more or less knowledge about a stock's value than someone else. The stock will always trade at fair value, making it impossible to consistently earn higher returns than the market.

However, others would argue that there are people who routinely beat the market by a great margin. But, for all the Peter Lynch's and Warren Buffett's in the world, there are millions of others with carefully chosen portfolios whose performance barely or does not exceed the performance of portfolios of randomly selected stocks. The weak-form of the Efficient Market Hypothesis (EMH) claims that markets are efficient so far as stock prices reflect all publicly available information. This means, according to defendants of the EMH, investors such as Lynch and Buffet can beat the market because they are lucky and are privy to information unavailable to most investors. This paper will test market efficiency by using ordinary least squares regression and Hurst Exponent analysis and exploring the intuition behind the EMH. This paper will also explore if the EMH proves that stock prices do follow Random Walks, and if so, why are there still people who seem to be the exception to the rule? Finally, is there an alternate theory to efficient markets?

Religion, Consumerism, & Cultural Appropriation

Kayla M. Farley

Faculty Mentor: Dr. Craig Martin, Professor of Religious Studies

Among the cultural and religious traditions across the globe, many of them make their way to America and become westernized, a process that entails stripping these traditions of elements relevant or important to the source culture. My goal is to study the past purposes and meanings of these culture-specific traditions, and see how the western effect has altered them. In addition, I'd like to conduct a survey among adults in America, testing their knowledge of these culture-specific traditions, and if they know of or practice any of these traditions, what do these traditions mean to them, personally, and find out why they may practice them. Specifically, some of the traditions I will be studying are Eastern traditions, such as yoga, the use of essential oils, etc. Based on the use of these traditions in their source cultures, it is evident that their meanings have changed, as they made their way to western societies.

The Power of Femininity in Magical Girl Anime

Melissa Mounier & Aliza Deen

Faculty Mentor: Dr. Staci Shultz, Associate Professor of English

Femininity in popular media is often portrayed as either weak or hypersexualized. Characters who wear feminine clothing or perform traditionally feminine roles are typically dismissed as background characters, or as a

supplement to their masculine counterparts. But the magical girl genre is different; it brings traditionally feminine characters to the spotlight and portrays femininity as strength. In magical girl animes, the main characters are usually young girls who fight enemies with supernatural powers. Typically, the girls go through transformations in order to gain their powers. Their transformations are meant to be cute; they don dresses or skirts that are usually bright in color and often have ribbons or frills, all of which are associated with young girls. And it is only when the characters wear their outfits that they gain their power, drawing the association between girliness and strength. We argue that the magical girl genre shows that being “feminine” is not the opposite of being “strong.” We look at three animes that feature main characters who embrace their femininity while exhibiting strength as they protect others: Revolutionary Girl Utena, Cardcaptor Sakura, and Puella Magi Madoka Magica. All three animes target the female demographic, which we believe encourages the expression of traditional femininity. By showing that femininity is not weak, the magical girl genre allows their audience to take pride in their feminine identities.

College Fed Challenge 2018

Kathleen Howell, Nicki LiTrenta, Isabella Diaz, Alexander Bruzzi, Robert Cologero, and Anthony Prestano

Faculty Mentors: Dr. Rossen Trendafilov, Assistant Professor of Finance, and Dr. Meghan Mihal, Associate Professor of Economics

In October 2018, STAC gathered a team of six students to participate in the nationwide College Fed Challenge competition. The ultimate goal was to create a compelling, yet practical, proposal for U.S. monetary policy that aligned with the Federal Reserve’s dual mandate of stable prices and maximum sustainable employment. To achieve this, we spent much of our time in the Bloomberg Laboratory analyzing key economic trends in domestic production such as labor market conditions, unemployment, and market volatility. In addition, the team also kept potential global developments in mind, such as emerging market instability as well as the possible effects of a trade war. At the conclusion of our research, we compiled our findings and monetary policy suggestion into an informative, coherent presentation that was given at the Federal Reserve Bank of New York. Our final recommendation for the Federal Open Market Committee was to take a dovish approach: maintain the target federal funds rate in the range of 2 to 2 ¼ percent. This conclusion was reached to ensure continued stability in the financial system.

The Impact of Water on Economic Growth

Desiree Bermudez, Katarina Lopez, Niamh McKeivitt, Alessandro Molinas, Alyssa Ponella, Hiywot Tadesse, and Valerie Winalski

Faculty Mentor: Dr. Meghan Mihal, Associate Professor of Economics

Historically, developing countries are greatly impacted by environmental issues. Water is a key issue that impedes economic development of a nation. For our study, we have chosen Peru, Pakistan, the Philippines, Jamaica, Guyana, and Chad to represent the less economically developed countries as we investigate the impact of water. In these countries, the overarching issue of water manifests itself in several different ways. Whether it is flooding and subsequent mudslides in Peru, a drought in Chad, or a general lack of clean water experienced across many less developed countries, it has a profound effect on the ability of a nation to catch up with the more developed world. These issues prevent the developing nations from growing and continue to knock them down further by affecting their health, poverty, and agriculture. This further harms their economy and prevents economic development. Through qualitative research, we seek to demonstrate that the environmental impacts of water have a knock on effect and stunt the growth of economies in such nations.

The Consequences of Deforestation in Developing Nations

Nicole Amerling, Isabella Diaz, Timothy Henion, Nicki LiTrenta, and Luke Taplin

Faculty Mentor: Dr. Meghan Mihal, Associate Professor of Economics

Developing countries, heavily burdened by their weaker economies, have been repeatedly exploited by multinational corporations in order to gain access to their natural resources. Population pressures, the drive to develop quickly, and a lack of regulation, has led to widespread deforestation across less developed countries. The need for expansion, and economic diversification within the developing world often leaves these nations with no other option, but to clear their forests in order to establish land for an agricultural foundation. The clearance of forestation for the purpose of producing goods for consumption, and trade has a drastic effect on the growth of a nation's economy, yet it places strains on natural resources. The economic history of the developed world suggests that deforestation up to certain threshold is necessary for development. However, due to differing geographic locations, and often a lack of infrastructure in the countries that make up the developing world, many have yet to achieve the expected development from deforestation. These nations are now surpassing that threshold, and are being confronted with the damaging environmental consequences of excessive misuse, and consumption of their natural resources. Previous short-term economic gains yielded as a result of deforestation are now being replaced by long-term detriments to the

environment, and could ultimately have adverse effects on the economies of these lesser-developed nations.

The Effect of Angiotensin on Water Absorption in *B. bufo* (small toad)

Amanda Leone and Silvia Jaeske

Faculty Mentor: Professor Kimberly Holt, Biology Laboratory Coordinator

The peptide hormone Angiotensin II (All) is well known for its role in regulating plasma-volume and blood pressure in vertebrates. This is also relevant to human medicine by regulating blood pressure and treating hypertension. All is both a dipsogen and a vasoconstrictor of arterioles. Dipsogen stimulates oral drinking in some fishes and most terrestrial vertebrates, such as, reptiles, birds, and mammals. However, amphibians absorb water across their skin which is called cutaneous drinking. All is known to stimulate cutaneous drinking. The purpose of this experiment is to compare water absorption rate and time spent in the water absorption response between control and All-treated toads provided with voluntary access to a water-saturated gauze substrate. The hypothesis is that if the toads are injected with All, it will directly stimulate the water absorption behavior and the cutaneous blood flow to the pelvic patch will increase (increasing water absorption). All also has an indirect effect in stimulating the release of neuropeptide arginine vasotocin, an antidiuretic hormone found in non-mammalian vertebrates.

Microplastic Accumulation in Wetlands of the Sparkill Watershed

Rob Hornberger

Faculty Mentor: Dr. Bianca Wentzell, Assistant Professor of Biology

All anthropogenic plastic, to varying degrees, will eventually break down into microplastics (MPs). With this break down we see a range of growing issues for conservation effort. MPs have been observed in the guts of several avian species as well have been shown to act as a vector for persistent organic pollutants (POPs) into the food chain. In the present study, we sought to understand how microplastics (MPs) are dispersed in wetlands along a tributary. Sediment samples were taken from three wetland ecosystems along the Sparkill Creek. Fenton's reagent was used as a means to breakdown the organic composition of the sediment sample. Microplastics carry a much lighter density than the degraded organic matter and were able to be separated in a solution of zinc chloride. Filtrate collected from the decanted separation solution was placed under a dissecting microscope whereby possible MPs could be collected. Fourier Transform Infrared Spectroscopy (FT-IR) was used to identify the types of plastics that were recovered from the separation. KnowitAll IR identification software (Bio-Rad Laboratories) allowed us to confirm the identity of possible MPs based on certain peak signals. We observed that

MPs concentrate in the most downstream wetland but can also be observed along the entire waterway. Additionally, we were able to identify polyethylene, polypropylene, and polystyrene in varying quantities at each site. We hope that the findings of this study will contribute to the identification of at risk ecosystems.

An Assessment of Pond Health at Sugar Pond in Hastings-On-Hudson

Alexa Massari

Faculty Mentor: Dr. Bianca Wentzell, Assistant Professor of Biology

The addition of nutrients to a body of water from run-off can profoundly affect aquatic ecosystems. Eutrophication, from run-off containing fertilizer and waste products, can cause algal blooms which disrupt species diversity and overall water quality. Run-off can also cause soil erosion which deposits sediment into water bodies and increases turbidity. Turbidity alters temperature and blocks sunlight which greatly impact aquatic life. Sugar Pond, located in the town of Hastings-On-Hudson in Westchester County, has been experiencing an increase in the population of algae and sediment deposition. Due to run-off from developed areas near the pond added nutrients and sediment have been carried into the water. Water samples from Sugar Pond will be tested for pH, dissolved oxygen, turbidity, nitrates and phosphates to determine the impact of run-off on water quality. Added nutrients would also have an effect on macroinvertebrate communities in the pond resulting in low diversity and low species richness of pollution sensitive taxa (Ephemeroptera, Plecoptera, and Tricoptera). Assessment of the vegetation community surrounding the pond will provide a possible solution for reducing the impact of run-off and sediment deposition in the pond.

Using Base-10 Blocks to Develop an Understanding of Addition and Subtraction

Lindsay Miller

Faculty Mentor: Dr. Suzanne L. Reynolds, Professor of Mathematics Education

Young students often find mathematical concepts like place value, addition, and subtraction are challenging to learn. However, through the use of manipulatives, learning these topics becomes much easier. Research shows that students have a clearer understanding of abstract concepts when their learning is aided through the use of concrete objects compared to instruction that only uses abstract symbols. As such, Base-10 blocks are often used in a classroom setting to help guide young students with their learning. This case study focused on a second grade student who struggled with regrouping in addition and subtraction. The objective of this study was to examine the effectiveness of Base-10 blocks in understanding abstract mathematical concepts.

The Effects of First Person and Third Person Narrative on Attitudes toward Disability

Cathy Courtadon

Faculty Mentor: Dr. Benjamin Wagner, Assistant Professor of Psychology

People with disabilities represent one in every seven people worldwide. Yet, research conducted in many different countries has shown that people with disabilities are often viewed negatively by non-disabled people. This study investigated whether narrative can affect attitudes about disability among college students. Fifty-seven undergraduate participants were randomly assigned to read a narrative about a protagonist in a wheelchair or a person with a metabolic condition. The stories varied by gender of the protagonist and point of view of the story (first-person or third-person voice). Participants answered surveys that measured experience-taking (empathy), their emotional response, and their attitudes toward disability. Point of view did not have a significant effect on attitudes or on experience-taking overall. However, when the main character was male, more experience-taking and more positive behavioral responses occurred with the third-person voice; when the main character was female, the same effects occurred with first-person voice. Female participants reported stronger emotions about a disabled protagonist than male participants; male participants reported more positive thoughts and feelings. Participants also reported stronger emotions when reading about an opposite-sex disabled character, but more positive emotions when reading about the same-sex disabled character. The results suggest that males and females may respond differently to disability, that their response may depend on the gender of the disabled person, and that people may experience more empathy about a disabled character of the same sex when reading a story in the first person voice, but experience more empathy toward a disabled character of the opposite sex when reading a third-person narrative.

Combat Climate Change

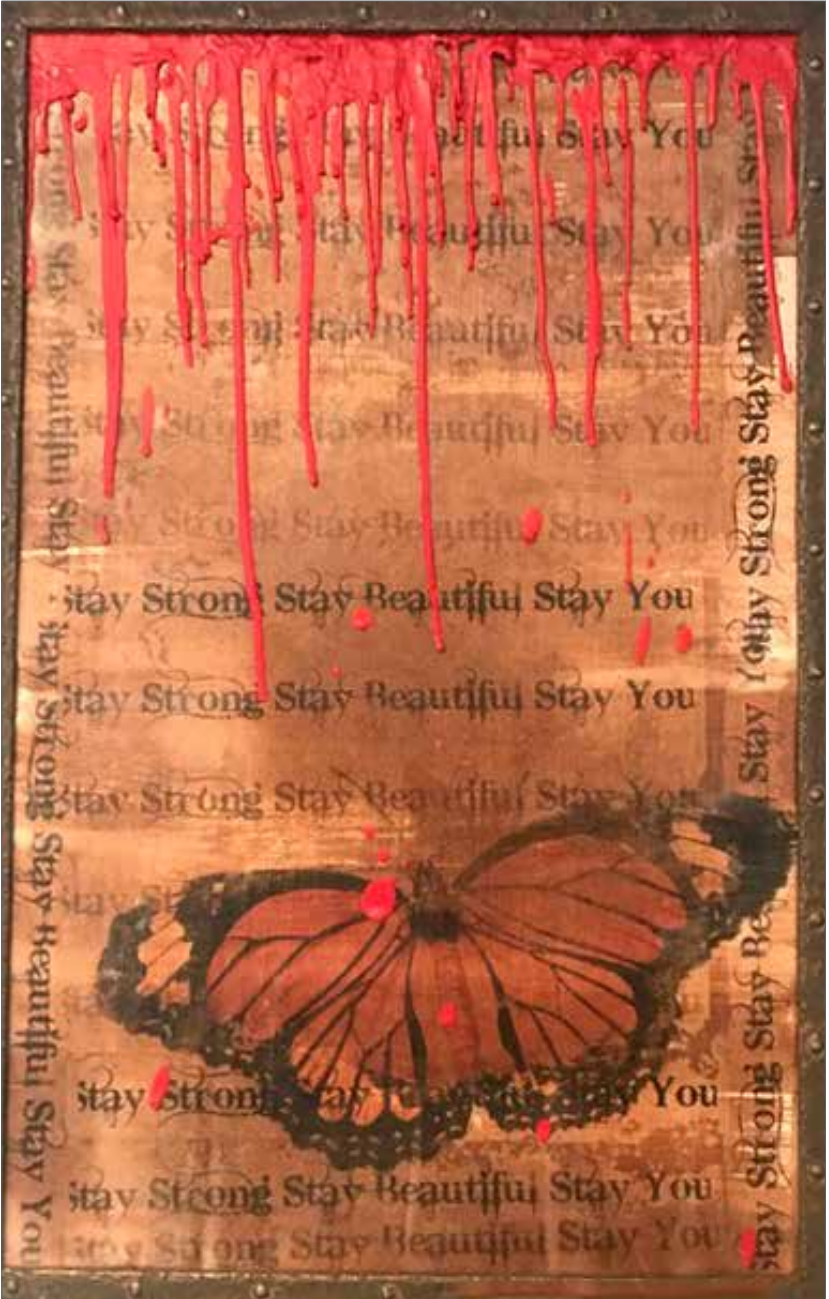
Rebecca MacLeod, Andrea Solimando, Rob Hornberger

Faculty Mentor: Dr. Bianca Wentzell, Assistant Professor of Biology, Dr. Robert Vermilyer, Professor of Computer Science, Dr. Meghan Dewitt, Assistant Professor of Mathematics, Dr. Deirdre Engels, Associate Professor of Marketing, Dr. Pamela Derfus, Assistant Professor of Management, Nina Bellisio, Associate Professor of Visual Communication

Virtual reality is an innovative form of user interaction where the user is placed in an immersive environment. It can be utilized as an educational tool to captivate the attention of high school and college aged students. Through virtual reality, a multidisciplinary team strived to create a lifelike experience to help emphasize the negative impacts of climate change based on the user's individual carbon footprint. This team was St. Thomas Aquinas College's first ever XLab; an experiential learning, project based course. Using public data

from the International Panel on Climate Change (IPCC) and National Oceanic and Atmospheric Administration (NOAA), catastrophic storm conditions were recreated in an immersive, virtual space based on Philadelphia. Models were created in order to show how variables including flood levels and wind speeds may cause damage to a familiar landscape. The team was comprised of students from computer science, mathematics, biology, and marketing backgrounds in order to make the most comprehensive, accurate product possible.



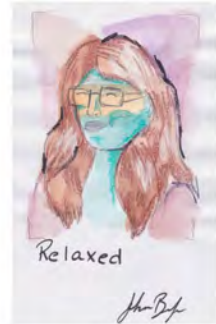
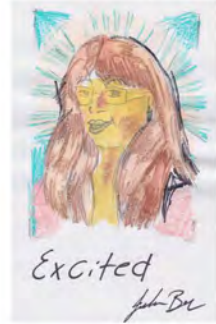


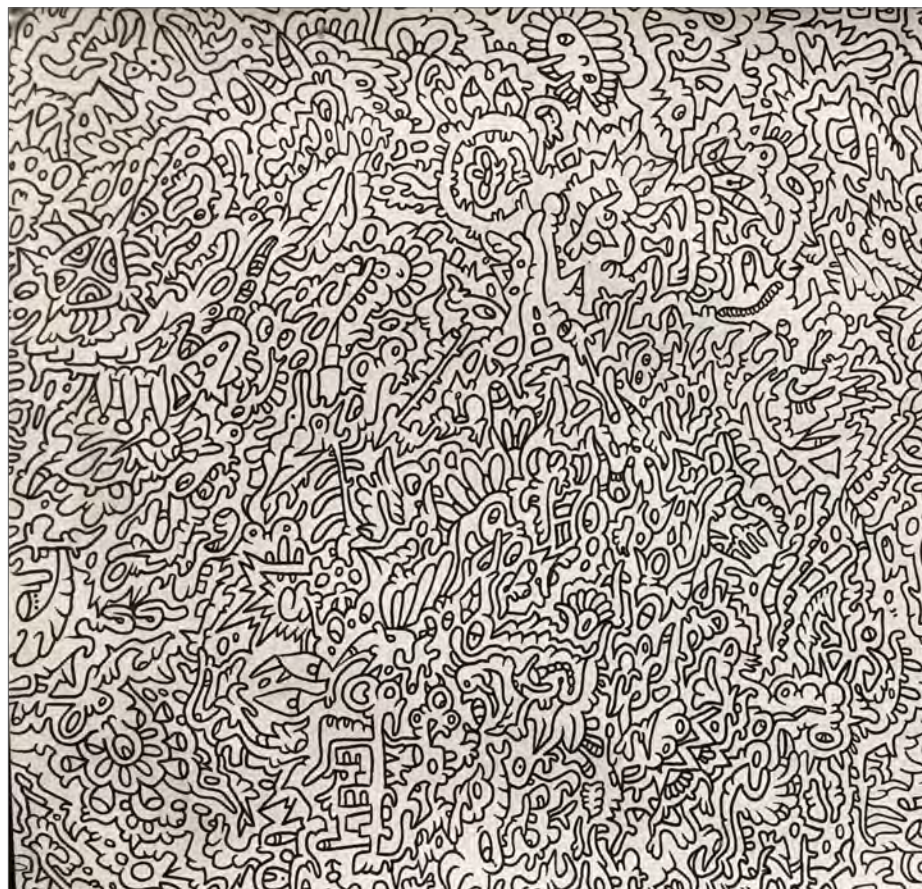
ART THERAPY Elena Dongaris

By William Shakespeare



Thursday, Friday, Saturday 8pm | Sunday 2pm





PERSONAL BRANDING

Ulyana Kitmanuk
07 400 500 708 | UK

EDUCATION

St. Thomas Aquinas College
Oswestry, KY

- Majoring in Visual Communications in Graphic Design with a minor in Marketing
- Honors Award on National College Honor Society Dean's List (2014-15)
- Graphic and Visual Arts of St. Thomas Aquinas College
- Library Journal Spring 2015
- Printed Designer for St. Thomas Aquinas
- Relevant coursework: Art Direction, Brand Development, Illustration, Design Typography & Processes and Production

Rickland Community College
Suffolk, KY

- AAI Original Design - August 2017
- Graphic Design - Spring 2017
- AAI AA American Third Team Award
- Designer for collaboration project with Environmental University in South Africa
- Competition practice for SCC

SKILLS

- Adobe Illustrator ★★★★★
- Adobe Photoshop ★★★★★
- Adobe Premiere ★★★★★
- Adobe Dreamweaver ★★★★★
- Adobe InDesign ★★★★★
- Illustration ★★★★★

Workx

DDG Dental Supplies
Website SEO Intern

- Identify effective keywords to increase traffic on the site
- Run Google Ads and PPC campaigns
- Use Google Analytics to increase growth
- Write persuasive call to action
- Implement meta data for products
- Perform Directory Submission
- Conduct research on competitors' offer for keywords and other SEO strategies that the company can benefit from

Abercrombie
Brand Representative

- Reorganize store layout to maximize sales
- Plan and merchandise to display items on mannequins
- Market and gather products in a way that's visually appealing to customers
- Help customers with product selection
- Perform daily transactions, take phone calls and messages

UK

VISUAL COMMUNICATIONS Ulyana Kitcmanuk



VISUAL ART Erica Murphy

20
19

JURIED STUDENT SHOW

DEADLINE

FOR ENTRIES

MARCH 1ST

MARCH 26

APRIL 15

SUBMIT

JPEGS OR PROJECT PROPOSAL
FOR NON-VISUAL ENTRIES
(MUSIC, POETRY, DANCE,
ETC)

TO AMAG@STAC.EDU

WEDNESDAY

APRIL 11

RECEPTION AND
PERFORMANCES



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AZARIAN MCCULLOUGH
ART GALLERY

VISUAL COMMUNICATIONS Ylmer Villafana