Gordon State College

Undergraduate Research Symposium

PROGRAM AND ABSTRACTS

April 23rd, 2021
ONLINE via Zoom

PROGRAM OUTLINE

Welcome: 8:55am

Podium Presentations:
Session A: 9:00 – 10:00am

Break: 10:00 – 10:15am

Session B: 10:15am – 11:00am

Break: 11:00 – 11:15am

Session C: 11:15am – 12:15pm

Lunch Break: 12:15 – 1:30pm

Poster Presentations 1:30 – 2:00pm

Awards Ceremony: 2:30pm

PODIUM PRESENTAIONS

Welcome: 8:55am

Session A: 9:00 – 10:00am

9:00 – 9:15am

Alisha Landreth - ***From Here to Eternity: The Perplexities of Archiving the Digital Age***

9:15 – 9:30am

Emily Duncan - ***King Tut: Mighty Egyptian Pharaoh or Unfortunate By-Product of a "Pure" Royal Bloodline***

9:30 – 9:45am

Lauren Peacock - ***Zoom University: How Social Distancing Helps, or Hurts, College Students***

9:45 – 10:00am

Morgan Taylor - ***CRISPR: Why There Is No Reason to Question Its Legality***

Break: 10:00 – 10:15am

Session B: 10:15am – 11:00am

10:15 – 10:30am

Emilee Goodwin ***- Dr. Narrator***

10:30 – 10:45am

Hannah Rutledge - ***His Wife and Demon Lover: The Forces of Demonic and Byronic Passions in Jane Eyre***

10:45 – 11:00am

Alyssa Copeland - ***Popular Gothic Novels are not Cheap Thrills: The Impact of the Gothic Sublime on Nineteenth-Century Romantic Works***

Break: 11:00 – 11:15am

Session C: 11:15am – 12:15pm

11:15 – 11:30am

Quarious Loper - ***Has The Revolution Been Televised?: Examining Protest Songs within Animated Shows***

11:30 – 11:45am

Victoria Brack - ***Beyond the Pines: Cultural Appropriation in Vampire Weekend's "This Life" and This Life***

11:45am– 12:00pm
Genevieve Chan ***- Harnessing Vulnerability: Using Safe Spaces to Navigate Conversations around Race***

12:00-12:15pm

Harrison Bishton - ***Effectuation of Emotionally Intelligent Leaders***

POSTER PRESENTAIONS

1:30 – 1:45pm

Angela Parra and Kensley Philemond ***- Determination of Myoglobin content in the skeletal muscle of the Florida manatee***

1:45 – 2:00pm

Hannah Rutledge - ***Francis Marrash: An Analysis of His Literary Europeanism and the Nahda in the Ottoman Empire***

Each poster presenter has a 15 minute timeslot to present their poster and answer any questions that the audience may have. The bulk of the student presentation will be given at the beginning of the session.

Session A – Abstracts

From Here to Eternity: The Perplexities of Archiving the Digital Age

Alisha Landreth

Faculty Mentor: Dr. Rachel Mittelman

When we think of archives and preserving history, many of us would probably picture dusty, old books from a dark corner of the library. Books and records that sit around waiting for someone to take interest in the details of generations past that are recorded on those pages. Some might even imagine scrolling through newspapers on a microfiche machine. It is rarer that anyone would think of archives being records or documents that are kept on computers from the 21st century. Using the library profession as a muse for future planning purposes, I will explore how we blend the past, present, and future when it comes to preservation efforts. As a society during the boom of the digital age, we are used to bringing up a search engine on our computer or phones to quickly find information on any topic or storing thousands of photos and videos on a small hard drive. We often forget that these digital items have a future expiration date until we are suddenly staring at a blue screen with only an error message and realizing that years of memories and records were just erased in mere seconds. As technology keeps growing and changing at an accelerated pace, the challenge of the most recorded generations in history is how to document and store the information safely so that when historians and future generations study the growth of our civilization, they are not also staring at a blue screen with an error message. This project will explore how we as a society can preserve our most recent history and future events so that we are not lost to time due to forthcoming technological issues.

This idea actually came to me in about 2017 when I was working on my Associates in Library Technology. We learned through our courses that in the 1960's librarians began preparing for a digital age and computer use by creating the MARC, *MAchine Readable Cataloguing record*, system for cataloguing, the most widely used system for cataloguing presently. As time progressed and new technologies kept popping up, such as personal use computers, floppy disks, hard-drives, compact discs, and thumb drives; records and documents were continually needing to be moved to updated storage systems. While we do not know exactly what the future holds technology wise, we as citizens and professionals must make sure that we keep record of our lives and work. Besides historians, so many occupations will need information to build on and learn from. Let our most recorded generations not be forgotten and lost to the ether once our technology expires.

King Tut: Mighty Egyptian Pharaoh or Unfortunate By-Product of a "Pure" Royal Bloodline

Emily Duncan

Faculty Mentor: Dr. Rachel Mittelman

My project is a perfect marriage of two of my great loves, History and Science. The problem with the study of History is that alone, it is not complete. Science completes many of the puzzles that the study of History uncovers.

As a teenager, I remember having the opportunity to tour the King Tut exhibit as it visited the Nelson-Atkins museum of Art in Kansas City, Missouri. I fell in love! The pieces of the exhibit worked together beautifully to paint a picture of a glorious and powerful Egyptian Pharaoh. It wasn't until years later that I learned about how forensic science discovered the truth. The funny thing about history is that as perspectives change, sometimes so do the "facts". Science eliminates the bias that the stories of history contain. Science is what uncovered the truth about the boy king and his tragic life.

Last semester, I began this project in my Biology class. Genetic diversity is the key to the survival and perpetuation of all life forms, including humans! When we can't evolve as a species, we die. My question throughout my research was what happens when humans interfere with Nature's plan? My focus in my Biology research was several different examples of what happens when the human traditions of keeping a Royal Bloodline pure goes terribly wrong. When humans mess with the natural order of things, nature fights back in an ugly way.

My Biology project has given me some great bones for this presentation. Highlighting various royal families from all over the world and throughout history, I have proven my point to be true. From King Tut to the Hapsburgs and even including King George III, it's clear to see what happens when the family tree is just a stick. Genetic diversity is the key to life! Through genetic diversity, we evolve to keep up with our ever-changing environments. While trying to keep these royal bloodlines pure, the royal families brought upon their descendants conditions such as grotesque physical deformities, high infancy mortality rates, life-long health frailties, and hemophilia.

The purpose of my research is to dive deeper into the life of King Tut to prove that he was undeniably the victim of genetic mutations resulting from inbreeding. To be complete in my research, I will include studies into King Tut's daily life to eliminate other possible causes of these genetic mutations or health conditions. I will study the food, medicines, and daily practices of King Tut and his people to see who else suffered the way Tut did, or if it was exclusively an unfortunate right reserved only for the Royal family. My future research will also need to include putting together as much of a family tree for King Tut as evidence allows. The health conditions and physical deformities King Tut suffered from during his short time on Earth are scientific fact, they actually happened. I want to know what caused them.

Zoom University: How Social Distancing Helps, or Hurts, College Students

Lauren Peacock

Faculty Mentor: Dr. Michael Mahan

The purpose of my project is to investigate the mental health effects of the COVID-19 pandemic on college students. More specifically, I will discuss how it has altered our stress levels. This research project originated as part of an Honors Contract for Dr. Michael Mahan's Health and Wellness for Living class in Fall 2020. COVID-19 was a fitting topic, as it is an ongoing worldwide public health crisis. Since January 2020, the pandemic has had detrimental effects on all groups of people across the globe in different ways. The elderly and those with underlying conditions, working parents, and healthcare workers are among these groups. I decided to research the impact on college students, not only because I am one, but also because this group is affected in a complex way. We are not the most physically impacted by the virus, as our age group makes up a relatively small percentage of cases and deaths. Nonetheless, the pandemic has had tremendous effects on our routines, and life as we knew it has been turned upside down. My thesis is that the secondary effects of the pandemic have caused more stress in college students' lives than we normally undergo.

I will first define wellness and discuss its many dimensions other than just physical health. I will then focus the discussion on three main contributors to pandemic-related stress on students: the transition to online learning, financial challenges, and lack of social interaction. In addition to data from the CDC and publications in the fields of public health, psychology, and education, I will rely on original data from a student research survey I facilitated at Gordon to support my thesis. This data will reflect my central idea that COVID-19 and the resulting stress is harmful to college students' overall wellness, not just their physical health

CRISPR: Why There Is No Reason to Question Its Legality

Morgan Taylor

Faculty Mentor: Dr. Richard Baskin

Genetic innovations such as CRISPR Cas9 are changing the lives of many Americans and people across the globe. CRISPR is a powerful tool that allows researchers to alter DNA sequences, opening up a whole new world of possibilities. This tool gives us access to gene-editing, which was once a futuristic concept we could never imagine being possible. While there are many misconceptions, such as the idea that CRISPR could create a new generation of Nazis and eugenicists, or the Christian belief that genetic alteration is going against God, this technology could change many lives for the better. The focus of this project is the possible beneficial aspects of CRISPR if it is legalized when the technology is completed. The list of benefits is long, but there are many important examples. CRISPR can aid those affected by genetic diseases or even eradicate such afflictions. It will also change the agricultural world, resulting in better quality products and improving many practices that are seen as unethical and inhumane. CRISPR can also add ease to farming, improving efficiency. Finally, CRISPR can provide a solution to spreadable diseases and viruses that affect us globally, such as the recent pandemic that we have been facing in 2020 and 2021. While the idea of it may seem frightening when it is not explained properly, CRISPR is revolutionary for America and the rest of the world.

Session B - Abstracts

Dr. Narrator

Emilee Goodwin

Faculty Mentor: David Janssen

The purpose of "Dr. Narrator" is to expound upon some Romantic innovations to narrative voice and how these innovations open up new possibilities for what the narrator's story can achieve. This project works under the thesis that the narrator is not merely a passive observer, serving to inform the reader of the events of a story and nothing more. Rather, the narrator plays more of an active role within a story, serving as a teacher for the reader in a new kind of experiential education. Working under the assumption that author and narrator are two distinct entities, the foundation for this thesis is laid by specifically analyzing the narrators of Lord Byron's *Don Juan* and Jane Austen's *Northanger Abbey* and showing how these narrators redefine their function by playing more active roles. Then, a brief expansion on this thesis and how this redefined role can be applied to works outside of Romantic literature, will conclude this project by establishing a new narratorial role as universal teacher.

This paper was written in the Fall of 2020 for Dr. Janssen's 19th century British Literature course, and was inspired by Wordsworth's poem "The Tables Turned". It's for this reason that some brief consideration of Wordsworth's didactic voice is used in the introduction, even though the bulk of the proceeding discussion focuses on Byron and Austen.

His Wife and Demon Lover: The Forces of Demonic and Byronic Passions in Jane Eyre

Hannah Rutledge

Faculty Sponsor: Dr. David Janssen

This project began as a term paper in an Honors British Literature survey course in Fall 2019. My original theory simply identified that Charlotte Brontë had reversed the gender of the traditionally male demon lover trope by forming a female demon lover through *Jane Eyre's* character Bertha Mason. I also relied on Sandra M. Gilbert's and Susan Gubar's monumental work *The Madwoman in the Attic* to establish the doppelganger relationship between Jane Eyre and Bertha. In addition, I analyzed excerpts from Charlotte Brontë's early journalistic writings, as they acknowledge that Brontë' intimately felt a possessive spiritualism whenever she engaged in the act of writing. Thus, I concluded that Bertha, Jane, and Brontë all contribute to and engage in demonic spirituality, demonstrating the power of women's passions and how they could lead to dangerous results, as evidenced by the case of "mad" Bertha.

In further developing my theory, I devoted Fall 2020 to researching how this idea of a female demon lover triumvirate was significant in both literary and historical contexts. I am now much more informed about Brontë's biography, as well as 19th century philosophies and practices concerning female madness. The most paramount discovery I made about Brontë was her fascination with Lord Byron and her interest in replicating the Byronic hero in her own stories. Edward Rochester is essentially the final version of Brontë's Byronic hero, and through Jane and Bertha's doppleganger relationship, Brontë is able to conquer and reform the Byronic hero.

My goal for the current stage of this ongoing project is to explain the "why" of my initial theory by showing that the demon lover passion provides the necessary agency to the women of *Jane Eyre* in order to achieve Rochester's ultimate reformation. Amongst many new additions to my project, I will still show that Bertha is indeed a demon lover, not a femme fatale, even as the latter figure was heavily explored during the Romantic and Victorian periods. Therefore, the beginning of my paper and presentation will be devoted to the various definitions associated with demon lover. I will also support my thesis with scholarship about the female gothic genre, such as Eugenia C. DeLamotte's *Perils of the Night.* I will then relate the concept of the female gothic with my research about female madness that I mentioned previously, especially from Elaine Showalter's *The Female Malady*.

Popular Gothic Novels are not Cheap Thrills: The Impact of the Gothic Sublime on Nineteenth-Century Romantic Works

Alyssa Copeland

Faculty Mentor: Dr. David Janssen

Romantic poets of the nineteenth century viewed gothic fiction as a cheap thrill. Many thought gothic authors aimed only to shock and frighten audiences instead of creating deep meaning in their works. Thus, romantic writers distanced themselves from the genre. But they could not help themselves from borrowing gothic elements, especially the gothic sublime. My project argues that the gothic sublime brings out the best flavors of the works produced by William Wordsworth, Samuel Taylor Coleridge, and Lord Byron. In my study, I define "gothic" as the eighteenth-century genre inspired by gothic architecture. The genre deals with suspenseful and supernatural plots propelled by the use of the sublime.

Edmund Burke, an eighteenth-century author, wrote that the sublime is the feeling of being close to death. Gothic writers used his interpretation along with other elements to create the "gothic sublime." Romantic writers also found themselves enamored with this concept. The sublime had large effects on their works, making their poems lasting and memorable. Therefore, it is important to study the aspects of the gothic sublime and its impact on Romantic literature.

Through my investigation, I will prove that Romantic poets use terror, distress, and tragedy to elevate the Gothic sublime. My presentation evaluates the works “Lines Written a Few Miles Above Tintern Abbey,” “The Rime of the Ancient Mariner,” and *Manfred*. I will show how each author uses elements of the sublime (terror, distress, and tragedy) to create strong impressions and reactions in their readers. My study also explains how they use the gothic sublime in a more Romantic context, incorporating nature and pure emotions to fuel their purposes, sparking deep feelings in the minds of readers. I will review what idea each author links to terror, distress, and tragedy and how that furthers their agenda.

My findings are that each author uses terror, distress, and tragedy to invoke an emotional reaction in the hearts of readers – in which the audience has sympathy for the speaker or protagonist. Though Romantic poets kept their distance from the gothic genre, the authors combined gothic and romantic elements to generate the sublime.

Session C - Abstracts

Has The Revolution Been Televised?: Examining Protest Songs within Animated Shows

Quarious Loper

Faculty Mentors: Dr. Janssen and Dr. Webb

Throughout this semester in an Honors colloquium course, we have been evaluating the meaning of protest songs and dissecting songs to determine whether songs are either protest songs or not. Yet within this paper, I will be arguing on whether protest songs are used and applied within television shows, specifically animated shows. I will be developing the argument of whether protest songs are applied as I define the songs used within the animated shows The Boondocks and the anime One Piece along with the anime films Akira and Jin-Roh: The Wolf-Brigade. I will be analyzing the songs used within these works by following the song explication method where you investigate the background of the song, interpretation of the song, and the application of the song with defining protest music. As I have been applying the method of explication to determine whether songs within animated shows are protest songs or not, I will be defining what is a protest song and whether the songs make the criteria or not based on the song explication method including how the themes of the show and context of the scenes and song are being applied. With this paper, I will be able to tie in a long passion of mine with my field of study which will make examining them so much more intriguing and engaging on my behalf. Moreover, in this paper, the main purpose is to be able to determine if protest songs are applied within everyday media and how songs within even television can be applied to the overall idea of protest songs. In this paper, I hope to be able to not only address if protest songs can be applied well within television shows but also to be able to prove that protest songs can be found within places that we would not think to find them.

Beyond the Pines: Cultural Appropriation in Vampire Weekend's "This Life" and This Life

Victoria Brack

Faculty Mentor: Dr. David Janssen and Dr. Brian Webb

"And darling our disease is the same one as the trees/ Unaware that they've been living in a forest." These last two lines in the final verse of Vampire Weekend's "This Life" reflect on the dangers of being consumed by small details and failing to understand the larger plans and principles or see the bigger picture. This speaks to a variety of issues we face today, but I believe it is especially relevant with current attitudes towards cultural appropriation. For this project, I will analyze the lyrics of "This Life" by Vampire Weekend along with the music video to reveal the subtle commentary they offer about the divisiveness that stems from anger toward acts of cultural appropriation. Pulling from interviews with the band members, I will provide some background on the band that I believe supports my arguments and contributes a deeper insight into my analysis. I hope to illuminate a fresh perspective on the matter with an appreciation and understanding of the "forest," or broad viewpoint, that "This Life" proposes.

This analysis was the impetus for a larger project I completed for an Honors Colloquium about protest songs in the Fall of 2020. I believe "This Life" by Vampire Weekend provides the most insight into the more important arguments discussed in my larger project, some key parts of which I plan to incorporate into my presentation in order to provide a larger critical context. In addition to the arguments conveyed in this analysis, I hope to make a persuasive case for expanding our academic use and conception of the genre known as protest songs.

Harnessing Vulnerability: Using Safe Spaces to Navigate Conversations around Race

Genevieve Chan

Faculty Mentor: Dr. David Janssen and Dr. Jessica Traylor

In March of 2020, George Floyd's murder was caught on video and witnessed by millions of viewers. The overt dehumanization symbolized the symptoms of racism in America. However, this call for racial equity was joined globally from France to Japan. Black Lives Matter became the call to arms, but many Americans still struggled to understand where racism is found in our society. We desperately needed to have an honest conversation. Although the internet was buzzing with opinions, it was hard to find a space where people could be open, curious, and vulnerable. In response to this need, a psychology professor and I started a book club around How to be an Antiracist. This club was to practice the Circle of Trust Approach, also seen as the creating of a safe space.

Rules and guidelines were set to establish a foundation of respect and to condition us for empathy. We invited faculty, staff, and students to join deep, vulnerable conversation about race guided by Ibram X. Kendi's book. Presenting on the experience will highlight the potential that safe spaces have for college communities to navigate awareness around sensitive topics. I will also discuss the discomfort and vulnerability in both facilitating and participating in this space from all perspectives. The successes and outcomes of this space were not from facilitation but from participation. The members of this club showed honesty, compassion, and courage. Without them, the results of this space would be lifeless

Effectuation of Emotionally Intelligent Leaders

Harrison Bishton

Faculty Mentor: Dr. Alan Burstein

Leadership is a continuously evolving skillset and artform, that requires persistent devotion and prioritization, in order to meet demands. Experienced leaders often speak and write about moments of exhilaration, while navigating nebulous futures or daunting decisions. The challenge is successfully integrating prior experience into future business objectives. Leadership dynamics grow in response to social influence, economic forces, or changing organizational objectives. Future modern leaders will require a multitude of diverse capabilities and a tenacity for growth and development, particularly with increasing globalization. Each successful project and completed task, beckons a future of new and larger assignments, typically with more at risk. The purpose of this research is to explore the interconnected nature of psychology and leadership, for the objective of developing emotionally intelligent leadership traits. Organizations seeking expansion in modern markets will benefit from leaders with intrinsic evolutionary skills for adaptation. Developing emotional intelligence enables an inherent nature for continual self-improvement and a natural desire to maximize performance. Ultimately, cultivating leaders that improve employee satisfaction, increase profitability, and welcome future growth challenges.

Poster Abstracts:

Determination of Myoglobin content in the skeletal muscle of the Florida manatee

Angela Parra and Kensley Philemond

Faculty Mentor: Dr. Cori Newton

Marine mammals differ from terrestrial mammals in that they have adaptations which allow them to have increased breath hold capacity. Some of these adaptations include varying oxidative capacity, tolerance to lactic acid and enhanced myoglobin content in the skeletal muscle. Previous studies have shown that increased levels of myoglobin in the skeletal muscles of some marine mammals correlates with increased dive duration. Although myoglobin levels have been studied in other marine mammals, there is insufficient data on myoglobin levels for Florida manatees (*Trichechus manatus*). To better understand the mechanisms that contribute to the dive capacities of manatees, myoglobin levels were determined in skeletal muscle collected from adult stranded Florida Manatees. Preliminary results have shown that the Florida manatees have very low myoglobin levels when compared with other marine organisms. For example, the Florida manatee has approximately 7 times less myoglobin than the common minke whale (*Balaenoptera acutorostrata*). The low myoglobin content in the skeletal muscle of the Florida manatee most likely reflects their unique diving and foraging behaviors compared to other marine mammals.

Francis Marrash: An Analysis of His Literary Europeanism and the Nahda in the Ottoman Empire

Hannah Rutledge

Faculty Sponsor: Dr. Rachel Mittelman

This project originated in Dr. Rachel Mittelman's Special Topics in History Modern Middle East course. The focus of research and presentation is the late 19th century Syrian writer and philosopher Francis Marrash. The interest in Marrash was sparked by auxiliary research about the Nahda (or Nahdah): the Middle East's cultural renaissance in the 19th century. This project will serve an interdisciplinary function since it will both analyze Marrash's literary texts, as well as locate his ideas within the Nahda movement and the dramatic sociopolitical changes that the Ottoman Empire experienced in the 19th century.

James L. Gelvin's *The Modern Middle East: A History* will provide the primary timeline and factual information about the events that occurred in the Ottoman Empire during the late 19th century, particularly those events that concern Europe's growing relevance in the Middle East at that time. Marrash's incorporation of European – especially French – philosophies into his work will be shown to mirror the relationship between the Ottoman Empire and European domination. Marrash's humanist and Romantic ideologies in his writing will be explicated in comparison with the historical backdrop to further reveal the conflicts between Eastern and Western thought.

Other contextual research will demonstrate the cultural power of Marrash's hometown of Aleppo and how it centralized the force of literary enlightenment in the Ottoman region. Oxford Professor Abdulrazzak Patel's *The Arab Nadah: The Making of the Intellectual and Humanist Movement* and *The Image of an Ottoman City* by UC Davis's Heghnar Watenpaugh are two sources that will furnish details about Aleppo's significance in the Nahda period. In addition, the more specific geographic case of Aleppo will aid the placement of Marrash amongst his contemporaries and their collective scholastic impact on the Ottoman Empire.