

GCIC ACADEMIC SYMPOSIUM 2022

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G.C.I.C.  
GULF COAST INTERCOLLEGIATE CONSORTIUM

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College of the Mainland.

# WELCOME

## to College of the Mainland's Eighth Gulf Coast Intercollegiate Consortium Academic Symposium 2022!

Big and small changes in our life require us to adapt. We do it all the time, so usually, we do not consider adaptation a big deal.

Recently, adaptation has been a question of survival. While COVID-19 has common denominators with other corona-viruses and while COVID-19 wasn't the world's first pandemic, it has presented us with an array of entirely new challenges we had not seen in our lifetime. And because globalization brought us closer than ever to everyone else on Earth, for some of us, COVID-19's challenges exceeded health risks. Our world's interconnected systems on which we have been dependent halted while new ones emerged and flourished.

In 1859, Charles Darwin's research redefined adaptation down to the granular level. It also challenged the Western world's understanding of existence; his work argued existence's "purpose" is survival and reproduction. Darwin's research showed adaptation helps preserve species. Along with his work, the then-emerging sciences of paleontology and geology, and the critical examination of religious texts caused existential crises for Westerners of the late 19th century which means people were forced to consider what their life's purpose was. Darwin suggested it was, in short, survival through reproduction.

Of course, we know now that it is not merely humans who work to survive and exist. All living organisms are in this race. Even non-living **ideas** are in it. Dreamed up, man-made ones like education, justice, human rights, beauty, quality, marriage, etc. with no "real" biological life to them are also in a race to adapt, survive, and exist.

At this point, we are coming out of the pandemic, and if we reflect and bring what knowledge we gained to the way we do business henceforth, we can gain **new** wisdom.

So **did** we **reimagine** adaptation? Did we broaden or reconfigure its meaning at all? Did we make it work for us? Did we adapt well? Did we adapt **ethically**? If adaptation prizes survival, what happens when our adaptation is short-sighted, insular, egotistical, ethnocentric, sexist, racist, prejudiced, misogynistic, ageist, classist, and/or privileged? What happens when it is just, equitable, and/or revolutionary?

This year's theme is broad and lends itself to cross-disciplinary examination, which is the driving force of our academic symposium. Today's student scholar presenters promise to surprise us with their take on the theme. We invite you to peruse the presentation schedule and choose sessions that best suit your interests; when in sessions, we ask you to engage actively with student presenters during Q&A. The aim is for them to grow as scholars during this experience and for their work to enrich the day's conversation.

Our hope for this symposium is that it serves multiple goals including enhancing students' communication skills, facilitating networking across the disciplines and colleges, and helping students build self-confidence and feel ownership of their work.

Enjoy yourself, and thank you for supporting student scholarship.

Sincerely,

Professors Dalel Serda and Shinya Wakao  
GCIC Academic Symposium Co-Chairs

## PROGRAM OVERVIEW

9:00 – 9:20 a.m.	<b>Welcome Remarks and Overview of Day's Events:</b> ..... LRC 131 Welcome Remarks Professor Dalel Serda and Shinya Wakao, GCIC Academic Symposium Co-Chairs
9:30 – 10:30 a.m.	<b>Session A1: COVID Forces Us to Adapt</b> ..... STEAM 102 <b>"The Effects of COVID-19 on the Mental Health of Teachers and Students"</b> Sophia Flores, Kaitlin Meier, Victoria Murphy, Lyzatte Zuniga, San Jacinto Central   Advisor: Judith Maima <b>"Remember: Immunology Meets Anthropology"</b> Josue Canaza, Houston Community College   Advisor: Dr. Nicolas Rangel <b>"r/AntiWork and the Inevitable Effects of COVID-19 on the Working Class"</b> Cheery Chukwukelu, Houston Community College   Advisor: Dan Flores
9:30 – 10:30 a.m.	<b>Session A2: Tyranny: Injustice Adapts, or We Adapt to Injustice?</b> ..... STEAM 103 <b>"THUGLIFE: How Racism Affects Everyone; the Hate You Give Little Infants Fucks Everybody"</b> Adriana Curiel, Lee College   Advisors: Javier Ramirez and Georgeann Ward <b>"Immigrant Student Struggle with a Focus on Undocumented Students"</b> Brenda Reyes Vasquez, Carol Hernandez, Yizelle Martinez, San Jacinto Central   Advisor: Judith Maima <b>"Hiding Behind a Mask: Confronting LGBTQ Discrimination in Moonlight"</b> Kennay Granados, Lee College   Advisors: Georgeann Ward and Javier Ramirez
9:30 – 10:30 a.m.	<b>Session A3: The Insidiousness of Oppression</b> ..... STEAM 105 <b>"Intersectionality and the Cycle of Oppression in Crazy Rich Asians"</b> Xitlaly Ruiz, Lee College   Advisors: Georgeann Ward and Javier Ramirez <b>"Freedom Writers: Demonstrating the Shortcomings in Education"</b> Sydney Joy Dado, Lee College   Advisors: Georgeann Ward and Javier Ramirez <b>"Gender, Sex, and Religion: A Study of Shifting Views"</b> Kayleigh Hasselmeier, COM   Advisor: Dalel Serda
9:30 – 10:30 a.m.	<b>Session A4: Reimagining Science in Adaptation</b> ..... STEAM 107 <b>"Reverse Adaption"</b> Yhovanka Marques and Alexa del Aguila, COM   Advisor: Luanne Wren <b>"Dietary Changes and Exercise for Managing Sickle Cell Anemia"</b> Karina Beglova, COM   Advisor: James Mubiru <b>"Sea Glass Research"</b> Thomas Elder, COM   Advisor: John Mohr
9:30 – 10:30 a.m.	<b>Session A5: Technology in Society</b> ..... STEAM 115 <b>"Social Media: Is All Adaptation Good?"</b> Regan Payne, COM   Advisor: Anna Munson <b>"The Transformation of Public Libraries and Open Access Media"</b> Sophia George, COM   Advisor: Anna Munson <b>"Not a Single Fish Can Climb a Tree"</b> Jesse Overton, COM   Advisor: Anna Munson
9:30 – 10:30 a.m.	<b>Session A6:</b> ..... STEAM 119 <b>"What is Love? Reimagining Fatherhood in the Face of Adverse Childhood Experiences"</b> Armando Alaniz and Kaitlyn Hudgins, COM   Moderator/Advisor: Anthony Johnson
10:40 – 11:40 a.m.	<b>Session B1: Adapting Medical Science Teaching</b> ..... STEAM 102 <b>"Relaxed Atmosphere Facilitates Students' Learning"</b> Karina Beglova, COM   Advisor: James Mubiru <b>"Using Sickle Cell Education Modules to Increase Science Engagement Middle and High School Students"</b> Brianna Platt, COM   Advisor: James Mubiru <b>"Sickle Cell Club Activism in Texas City Middle and High School"</b> Cindy Vargas, COM   Advisor: James Mubiru
10:40 – 11:40 a.m.	<b>Session B2: Reimagining Complex Human Experiences</b> ..... STEAM 103 <b>"Human Evolution's Modern Medium"</b> Bailey Rankin, COM   Advisor: Anna Munson <b>"The Historical Significance of Howl by Allen Ginsberg"</b> Melissa Wells, San Jacinto College – North Campus   Advisor: Cody Pogue <b>"The Backwards Adaptation of Mentally Afflicted Adolescents—and How to Fix It"</b> Gabriel Kirkoff, COM   Advisor: Dalel Serda

<b>10:40 – 11:40 a.m.</b>	<b>Session B3: Fine Arts in Adaptation</b> ..... STEAM 105 <b>“Beyond Broadway: An In-Depth Analysis of Musical Theatre”</b> Aidan Jones and Trenton Peterson, Odyssey Academy/COM Advisor: Anna Munson <b>“Reimagining History: The Adaptation of Salisbury Cathedral’s Floorplan Through 3-D Interpretation”</b> Melanie Heard, Brazosport College Advisors: Kamillah Campbell and Carrie Pritchett
<b>10:40 – 11:40 a.m.</b>	<b>Session B4: Reinterpreting Classic Literature</b> ..... STEAM 107 <b>“Inner Adaptation”</b> Kaneburley Rimpler, COM   Advisor: Gwendolynn Barbee-Yow <b>“Reimagining Adventures through Wonderland: Salvador Dali’s Surreal Interpretation of Lewis Carroll’s Classic”</b> Breanna Emerson, COM   Advisor: Brian Anderson <b>“A Taxi Ride with Death”</b> Iverson Williams, COM   Advisor: Gwendolynn Barbee-Yow
<b>10:40 – 11:40 a.m.</b>	<b>Session B5: Effects of Society on Private and Public Selves</b> ..... STEAM 115 <b>“The Whiskey Rebellion”</b> Brian Sharpe, San Jacinto College South   Advisor: Abbie Grubb <b>“‘Rolex’ Urban Ugandans’ Food Adaptation to Fast City Life”</b> Noah Mubiru, Alvin High School   Advisor: James Mubiru
<b>10:40 – 11:40 a.m.</b>	<b>Session B6: Creative Writers’ Reading</b> ..... STEAM 119 <b>This selection of students from this semester’s Creative Writing class at COM will be featured:</b> Elaina Gilbertson, Melody Jones, Allie Yarn, Robyn Lechman, Cody Bassett, Kyndal Carter, Lillie Cochran, Leah Hunt, Dulce McClure   Advisor: Dalel Serda
<b>11:50 a.m. – 12:50 p.m.</b>	<b>Session C1: Adaptation During COVID Times</b> ..... STEAM 102 <b>“Advantages of Soymilk in Lessening COVID-19 Symptoms”</b> Deidre Sprague, COM   Advisor: James Mubiru <b>“Artistic Creative Activities (ACA) and COVID-19”</b> Tania Sierra, COM   Advisor: James Mubiru
<b>11:50 a.m. – 12:50 p.m.</b>	<b>Session C2: Reimagining Justice</b> ..... STEAM 103 <b>“The Impact of the Louisiana Purchase”</b> Fabian Cedillo, San Jacinto College North   Advisor: Cody Pogue <b>“How to see Tonantzin: An Invitation of Identity and Survival to my Brown Hermanos”</b> William Gomez, COM   Advisor: Anna Munson <b>“Exploring the XYY Myth: Genetics and Criminology”</b> Amani Khurram, San Jacinto South   Advisor: Abbie Grubb
<b>11:50 a.m. – 12:50 p.m.</b>	<b>Session C3: Unimagining Bias</b> ..... STEAM 105 <b>“The Objectification of Women: A Philosophical Outlook”</b> Ariana Larios, San Jacinto College North   Advisor: Cody Pogue <b>“Defying the ‘Mythical Norm’ in Marvel’s Eternals”</b> Chad Griffin, Lee College   Advisor: Georgeann Ward <b>“The Evolution of Women’s Rights”</b> Carys Ragsdale and Joselyn Leos Fasci, COM   Advisor: Anna Munson
<b>11:50 a.m. – 12:50 p.m.</b>	<b>Session C4: Adapting and “Success”</b> ..... STEAM 107 <b>“Audie Murphy, Most Decorated Soldier of WWII”</b> Anthony Gamage, San Jacinto South   Advisor: Abbie Grubb <b>“Balance Between Business and School: Adapting as a CEO, a Student and Creator”</b> Ashley Love, COM   Advisor: Shinya Wakao <b>“The Effects of Mental Health on Student Success”</b> Jennifer Freyaldenhoven, Maressly Garcia, San Jacinto Central Advisor: Judith Maima
<b>11:50 a.m. – 12:50 p.m.</b>	<b>Session C5: University of Houston Doctoral Student Showcase:</b> ..... STEAM 115 <b>“What’s it Like to Be a Graduate Student?”</b> Patrick Stockwell, Literature & Creative Writing Ph.D. student Ann O’Bryan, Literature & Rhetoric, Composition, Pedagogy Ph.D. student Leah Fretwell, Literature & Creative Writing Ph.D. student
<b>1:00 – 1:45 p.m.</b>	<b>Lunch   Keynote Talk and Q &amp; A:</b> ..... LRC 131 <b>“Emerging Arboviruses”</b> Dr. Patricia Aguilar, UTMB
<b>1:45 p.m. – 2:00 p.m.</b>	<b>Awards and Wrap-Up</b> ..... LRC 131



# STUDENT PRESENTATION ABSTRACTS

In order of scheduled presentation; please see the presentation schedule above.

NOTE: These abstracts have only lightly been edited to preserve students' intellectual property and authenticity.

**9:30 – 10:30 a.m. | Session A1**

## **STEAM 102: COVID Forces Us to Adapt**

Sophia Flores, Kaitlin Meier, Victoria Murphy, Lyzette Zuniga, San Jacinto Central | Advisor: Judith Maima

### **"The Effects of COVID 19 on the Mental Health of Teachers and Students"**

The COVID-19 pandemic's suddenness shocked the entire education system to the core. Without any preparations, academic institutions had to halt all learning activities to preserve students' safety. At the same time, teachers also had to readjust teaching practices to meet new health regulations. According to a study by the U.S. Census Bureau, over 40% of survey respondents showed signs of depression or anxiety, and as the lockdown drags on, these figures may continue to rise. Moreover, educators are worried about students' well-being during the pandemic. For starters, students struggling with pandemic produced stress and trauma, and there are lots of them who have limited access to proper counseling. Also, experts claim that isolation and lack of physical and social interactions will lead to increased cases of mental illness in the future. Overall, these changes will affect human interaction and culture moving forward. As students' performance level decreases, the achievement gap widens.

In response to the overwhelming wave of mental health issues that arose due to the pandemic, we have found a few resolutions to help. First, schools need to begin to prioritize staff training but also prioritize their staff's mental health. Teachers and staff can't care for students' mental health if they don't even know how to take care of their own. Secondly, we believe that schools should begin to push and help students find their peace. By this, we mean that we think schools should encourage peaceful, meditative activities. This will in turn help increase their academic success.

### **"REMEMBER: Immunology meets anthropology"**

Josue Canaza, Houston Community College | Advisor: Dr. Nicolas Rangel

Throughout history, scientific ideas have had an incommensurable effect on the understanding of human nature. While transcending the barrier of factual scientific thought, the interlude between nature and philosophy can bring powerful insights—for good or bad—to our anthropological discernment and societal development. Through this essay, I raise lessons from immune memory research that cut across the limits of science to gain insights into humankind's power of adaptability and resilience. SARS-COV-2 infection is heterogenous to each individual. The immune response relies on 2 mechanisms: innate

and adaptive immunity. Being innate immunity responsible for an immediate response yet unspecific to infection, adaptive immunity is responsible for the long-lasting and high-specific responses. Current research on the immunological response against SARS-COV-2 raises the key role of T-Cells that compose the adaptative immunity in the prevention of severe cases of COVID-19. The emerging new variants have severely challenged the hopes of the global vaccination efforts, their rapid spread and concerning variability from the original strain seemed to push downwards and sink the ship that as a society we're trying to get to float. Nonetheless, although the increasing infection rates skyrocketed. T-cells had our back, remembering the old enemy and becoming stronger, sending a message of hope that unveils the inner adaptive nature of the human soul. Our understanding of adaptation gets a real-life example to push our anthropological conception and remind us of what we are made of. To reimagine adaptation as an intrinsic purposefully-gifted quality of our species, makes us stand out against adversity. Remembering the ghosts of the pasts and how we defeated them, as well as the motives of our enterprises that brought us here will have a long-lasting effect and create a shield against future challenges.

### **"r/AntiWork and the Inevitable Effects of COVID-19 On the Working Class"**

Cheery Chukwukelu, Houston Community College | Advisor: Dan Flores

The COVID-19 pandemic has left long-lasting effects on the world. The economy, health, and politics of several nations have been affected by this virus. In between mask mandates and online schooling, the workforce has taken major hits that have translated into a type of rebellion from workers. By April of 2020, the unemployment rate in the US was at 14.9%. This is the highest it has been since 1948. "Unemployment for all, not just the rich!" These are the first words one sees at the homepage of the Reddit forum, 'r/Antiwork', a sharp statement that encompasses the group's main ideology. With a membership count of more than 1.7 million people, this group is at the forefront of the so-called "anti-work" movement that is brewing in the United States. A recent interview with one of the moderators sparked interest in the group's focus: What are their intentions? Why is there a shift in workplace politics? Who is to blame for this "extremist" movement? The constraints of the pandemic meant workers either lost their jobs or were forced to work from home. An unexpected consequence of this was that workers in all sectors were able to reflect on their working conditions in ways that were largely unavailable to them before. Within the space of this ironic freedom, the "anti-work" movement wishes to adapt to the post-

COVID-19 era. I will discuss why workers have turned to online forums to fight against certain workplace cultures and how the pandemic became a catalyst for this reaction.

**9:30 – 10:30 a.m. | Session A2**  
**STEAM 103: Tyranny: Injustice Adapts, or We Adapt to Injustice?**

**"T.H.U.G.L.I.F.E.: How Racism Affects Everyone. The Hate You Give Little Infants Fucks Everybody"**

Adriana Curiel, Lee College | Advisor: Georgeann Ward

Audre Lorde's "Age, Race, Class, and Sex: Women Redefining Difference" discusses systemized oppression in the United States and how it relates to the mythical norm. In America, who is inferior and who has power is determined by the mythical norm. Lorde introduces the idea of the mythical norm in her article. She states, "In America, the norm is usually defined as white, thin, male, young, heterosexual, Christian, and financially secure. It is with this mythical norm that the trappings of power reside within this society" (Lorde 116). The farther away from the mythical model a person is, the more oppressed they are bound to be. The systemized oppression in *The Hate U Give* directed by George Tillman Jr. is wretched. This film is about a black teenager living a double life when she is around different groups of people, specifically different races. *The Hate U Give* argues that racism is a cycle that stems from the hate people receive during childhood.

**"Immigrant Student Struggles with a Focus on Undocumented Students"**

Brenda Reyes Vasquez, Carol Hernandez, Yizelle Martinez, San Jacinto College Central | Advisor: Judith Maima

Immigrant students go through so much to come to this country for a better future for themselves. We must help, protect, and educate these students at all costs by eliminating deficit thinking and low self-esteem, and by making sure the teachers educate these young children to get a better support system within the schools they teach to better help the students who need them most. Schools need to add more programs for incoming immigrants. The lack of focus seen in immigrant students is a huge problem that is still noticed today. Sadly, although there have been some improvements in resources for these children, it's still not enough and we need to do better to give them the help they deserve. Undocumented students especially are limited to where they go, but at many times some parents do not allow their students to go outside of what they know due to the fear of being deported. In high school, many start feeling like they do not belong because of college applications, getting driver's licenses, and not having access to the many needed resources. We need to work with these students to recognize their needs and their value.

**"Hiding Behind a Mask: Confronting LGBTQ Discrimination in *Moonlight*"**

Kennay Granados, Lee College | Advisors: Georgeann Ward and Javier Ramirez

The black community has faced marginalization and oppression as a result of systemic and individual racism for centuries. However, despite the black community's solidarity against racial discrimination, the community is plagued by homophobia and rejection of its LGBTQ+ members. A seemingly hypocritical flaw, prejudice based on sexual orientation within the black community, is often relegated to the sidelines by the issue of race. Correspondingly, Audre Lorde's "Age, Race, Class, and Sex: Women Redefining Difference" states that refusing to recognize the different sources of oppression impedes greater social change and results in "voluntary isolation, or false and treacherous connections" (115). Lorde argues that not acknowledging differences encourages people to express one aspect of themselves and shun others. This rejection of one's intersectionality is destructive and fragmenting, exemplifying the dangers of alienating parts of a community. Similarly, Barry Jenkins' film, *Moonlight*, gives the audience an insight into the harsh reality of being a bicurious black man in Liberty City, Miami, at the height of the crack epidemic. Following the life of Chiron, a taciturn child who grapples with accepting his sexual identity, *Moonlight* explores how Chiron is forced to hide his sexuality and adapt to his environment. Pressured by a community that rejects homonormativity, Chiron hides behind a mask of masculinity to survive. By using Lorde's work as an analytical base, in this presentation, I will show how *Moonlight* exemplifies how the inability to accept the differences by members of a community inhibits social progress and contributes to the cycle of oppression.

**9:30 – 10:30 a.m. | Session A3**  
**STEAM 105: The Insidiousness of Oppression**

**"Intersectionality and the Cycle of Oppression in *Crazy Rich Asians*"**

Xitlaly Ruiz, Lee College | Advisors: Georgeann Ward and Javier Ramirez

In "Age, Race, Class, and Sex: Women Redefining Difference," Audre Lorde addresses the effects of intersectionality, along with how a culture's cycle of oppression affects relationships. Lorde defines intersectionality as the overlapping of factors of identity that are used to oppress people and deem them inferior. The cycle of oppression involves the continuation of oppression through the mistreatment of minorities, deemed socially acceptable. Cultures continue to perpetuate the cycle of oppression because of the traditional significance it has on generations. An intersectional analysis of Jon M. Chu's 2018 film *Crazy Rich Asians* reveals the cycle of Chinese familial hierarchy oppression. My presentation focuses on the main protagonist, Rachel Chu, a highly educated, professional, middle-class American. My analysis attends to Rachel's time in Singapore, where the matriarch and family acquaintance's view of Rachel's identity threatens the familial hierarchy. *Crazy Rich Asians* demonstrates how the cycle of oppression within Chinese culture is challenged by Rachel's intersectionality, which acknowledges the continuation of oppression within the

Chinese familial hierarchy. The presentation highlights the discrimination the oppressed face for their intersectionality and how they deal with oppression while understanding an unfamiliar culture.

### **"Freedom Writers: Demonstrating the Shortcomings in Education"**

Sydney Joy Dado, Lee College | Advisors: Georgeann Ward and Javier Ramirez

The American education system is recognized as a symbol of opportunity and higher learning. However, its notion of equality and success through hard work has failed its most vulnerable students. Audre Lorde addresses the issue of inequality in "Age, Race, Class, and Sex: Women Redefining Difference." Specifically, Lorde discusses the concept of the mythical norm and implies intersectionality, arguing that the inability to recognize and support difference and diversity will hinder people from moving forward. These mythical standards and effects of intersectionality are negatively woven into our schooling system. Richard LaGravenese's Freedom Writers demonstrates the effects of intersectionality in the American education system and the system's failure to address it, thus resulting in unfair oppression of many students. The film portrays this through the story of an English class living in a violent area of LA. Although the students are provided the same resources as their peers, their priorities, learning platform, and hardships are not equivalent. In my presentation, I will discuss how the school system fails to address its most vulnerable students, resulting in their oppression.

### **"Gender, Sex, and Religion: A Study of Shifting Views"**

Kayleigh Hasselmeier, COM | Advisor: Dalel Serda

The treatment of women significantly worsened from the end of the Anglo-Saxon period to the end of the Middle Ages. The Anglo-Saxon period allowed women to be treated equally to their male counterparts if the woman was affluent enough to be able to implement her ideas into society. However, the restructuring of the Catholic Church following the Norman Conquest can be considered one of the fundamental reasons for the regression of women's rights. Essentially, women went from being equal to men because of their ideas to being inferior to men and their worth stemming from the man supporting them. In addition, with the rise of problematic tropes involving Mary and Eve, the views towards women were successfully limited. In the Mary trope, medieval women are compared to an unobtainable version of Mary, who was the ideal religious woman. The Eve trope, on the other hand, presents women as deceitful and manipulative to portray Eve's attempt to manipulate Adam into eating the forbidden fruit.

Chaucer's "The Wife of Bath's Prologue" is about a woman named Alysoun who defies the stereotypical conventions that the fourteenth-century Church imposed. The Wife of Bath challenges masculinity and religious authority within her prologue and gives new hopes to women suffering from unruly prejudices during the Middle Ages. In addition, Alysoun speaks out against fourteenth-century gender standards by challenging the Church and its various issues.

The focus of this research is to look at the development of religion in England as well as the shifting condition of women's rights to understand the impact it had on people. Finally, this presentation will cover the relationship this has with our modern-day society and how we continue to adapt to significant changes in our lives.

## **9:30 – 10:30 a.m. | Session A4 STEAM 107: Reimagining Science in Adaptation**

### **"Reverse Adaptation"**

Yhovanka Marquez and Alexa Del Aguila, COM | Advisor: Luanne Wren

Humanity hurdles past nature's barriers, with minimum awareness of the consequences. As resources for human life decrease and cause pollution, such as the availability of organs for transplant and fuel for cars, alternative resources for these solutions are being found and they are animals. Since there is an organ shortage for organ transplants, animal organs are the alternative solution. Recently, a pig's heart underwent genetic modifications to accommodate a human body for a heart transplant. This specific patient was previously put on cardiac support for an irregular heartbeat, unable to receive a mechanical heart pump. As the centuries passed, the world became more modernized. An example would be day and night with the development of electric light. Humans are now finding a way to create a glow-in-the-dark tree to replace streetlights in the nighttime. The DNA found in Bioluminescent bacteria, which is found in jellyfish is being split in half then treated with chloroplast of a common houseplant to produce the light jellyfish and fireflies produce. These alternative resources seem like a good idea but may cause more harm than good. Humans created a pathway for animals to adapt and now animals are creating a pathway for humans to adapt.

### **"Dietary Changes and Exercise for Managing Sickle Cell Anemia"**

Karina Beglova, COM | Advisor: James Mubiru

Sickle cell disease (SCD) is an inherited, non-contagious red blood cell (RBC) disorder. For a child to inherit sickle cell, both parents need to carry the gene SCD. About 100,000 people in the United States have SCD. People of African descent make up 90% of the population with SCD in the United States, however, it also affects people of Hispanic, South Asian, Southern European, and Middle Eastern ancestry. SCD affects these populations because having the sickle cell trait confers protection from malaria.

SCD came from evolution's attempt to protect against malaria, even though it introduced other health problems.

In SCD, RBCs change shape from the normal biconcave disk to a sickled shape. The sickled cells stick to each other and blood vessel walls preventing organs from getting enough oxygen. They also do not live as long as healthy cells resulting in hemolysis and anemia. Anemia makes SCD patients feel pain and are tired due to a lack of oxygen. It has been reported that SCD patients have insufficient nutrient intake to meet their metabolic needs.

We propose that SCD can be managed by consuming a balanced diet consisting of legumes, lean meats, fruits, vegetables, and



whole grains. Such a diet provides much-needed nutrients and lowers inflammation that is reported to aggravate SCD symptoms. Another important component of SCD diet management is water. Staying hydrated is important in SCD patients because it prevents the RBCs from sickling. It is recommended that SCD patients consume at least eight glasses of water daily to prevent dehydration. In addition to diet, regular, moderate exercise is beneficial as it decreases inflammation and stress and improves vascular health and physical function by promoting blood flow. SCD patients should avoid medications like decongestants that contain pseudoephedrine because they impair the movement of RBCs.

### **“Sea Glass Research”**

Thomas S. Elder, COM | Advisor: Professor John Mohr

“Sea Glass,” also called “Beach Glass,” is glass that is found at the beach. The glass has been in the surf zone continually weathered by the waves and tidal patterns at the beach. This action removes sharp edges and scratches the glass, converting it from transparent to opaque. This glass is widely collected at the beach and used by artisans close to the shore. The purpose of this research was to understand this weathering process and to see if we could use it to predict the time it would take to produce “Sea Glass.” A stream table, with three wave paddles, was utilized to create a predictable wave pattern at an accelerated rate. The stream table was filled halfway with a “beachfront shoreline” to replicate a Galveston Island beachfront. Six pieces of broken glass, each about one square inch were weighed. The sharper angles were measured thinking that these would be the first to be rounded or reduced by the shoreline processes. The thickness of each sample was measured as well. Finally, we mixed seawater from a combination of distilled water and sea salts, mixed to maintain a salinity around that of Galveston Island beaches between 20 – 28 ppt, a consistent density for seawater. The test samples of glass have shown abrasions from the sand and wave action. The mass of several samples has decreased and surface scratches have been noted on the surface of the glass. Our hypothesis is correct that a simple stream table can be used to replicate a complex beach environment to produce Sea Glass. We intend to continue the experiment to test the predictive possibilities of the experiment next.

## **9:30 – 10:30 a.m. | Session A5 STEAM 115: Technology in Society**

### **“Social Media: Is All Adaptation Good?”**

Regan Payne, COM | Advisor: Anna Munson

Adaptation is supposed to make life better, but does it always do that? The adaptation of technology has helped the human race in many ways, but the creation of social media and the adaptation of that may be detrimental to teens, yet they are constantly using it. In “The Common Sense Census: Media Use by Tweens and Teens,” 2019, they found that sixty-nine percent of twelve-year-olds owned a smartphone. They also found out that the average time an eight to twelve old spends on screens, excluding schoolwork, is four hours and forty-four minutes per day and thirteen to eighteen-year-olds spend around seven

hours and twenty-two minutes per day. Studies have shown that social media can have negative effects on teenage body image issues, eating disorders, depression, suicide, and many other problems. Not only that, but many challenges spread through social media have ended with teenagers hurt. Also, there are indirect effects of spending a lot of time on social media, such as a decrease in physical health due to not enough exercise. While there are upsides to having social media, like making new friends and staying connected with family, it is not good for teens to spend a lot of time on it.

### **“The Transformation of Public Libraries and Open Access Media”**

Sophia George, COM | Advisor: Anna Munson

As early as the 1970s, with the creation of the first eBook, technological advances that are considered common today were appended to classical library operations (“About Project Gutenberg”). Content browsing, consumption, and variety have been simplified and expanded as a result of technological influence on libraries, particularly in the constantly expanding universe that is cyberspace. Although not always precisely cataloged to specific standards, the internet could be considered the largest library in existence, because the internet as a whole can be used as an informative source. Furthermore, specific online databases and archives reflect the perpetual arrangement of how physical libraries have always functioned. One consistent feature both physical and online libraries hold is the types of media that these sources provide openly; however, meaningful qualities of in-person information resources—such as material care, social communities and environments, and access to a library’s content—may be absent in digital libraries. Additionally, the abundance of digital resources can easily be tainted with misinformation more frequently than physical media, which has been officiated through publishing and printing. Tangible publications in libraries can have limitations in availability, but the regeneration of information sources through conventional, physical library standards with some integration of technological resources could reveal the benefit of a physical library’s qualities compared to digital databases alone. Concerning how libraries have been reestablished online, it is important to acknowledge that the growth of the internet has transformed the way people access information.

### **“Not a Single Fish Can Climb a Tree”**

Jesse Overton, COM | Advisor: Anna Munson

Our whole life in the school system we have been pushed and persuaded to follow one path created by lawyers and policymakers. This is now the 21st century, however, and we should not be holding our students back in this archaic and downright useless system any longer. I am not talking about the teachers by any means, almost all of them are in it to touch the hearts of the children they come into contact with, and many of their hearts are plated in gold. I am instead talking strictly about the curriculum. I do not even mean simple math like algebra and a little bit of geometry. I am instead talking about forcing kids down a path in which they must take four years of math even if they are going into an English major. I am instead talking about the countless hours of homework that kids are put through, keeping them inside when in reality the best thing they can do is



go outside. I am instead talking about the eight-hour school days which have held kids back for years, and yes, some kids need them to get away from home, but the science doesn't lie: they just aren't effective.

### **9:30 – 10:30 a.m. | Session A6 STEAM 119: Special Non-Juried Session**

#### **What is Love? Reimagining Fatherhood in the Face of Adverse Childhood Experiences**

Armando Alaniz and Kaitlyn Hudgins, COM | Moderator/Advisor: Anthony Johnson

This abstract proposes a student-driven panel discussion focusing on the following research and discussion questions: 1. What qualities, characteristics, emotional sensibilities, habits, and behaviors separate a present and available father from one who (re)inflicts absence, abuse, neglect, and/or loss for their children? 2. What can students, academics, community leaders, non-profit organizations, and government institutions do to promote and steward healthy fathers and sustainable relationships between fathers and their families?

Members of this panel will share their personal experiences growing up in households where emotions were not safe to disclose, with fathers who were largely absent, and/or showed their affection through presents instead of presence. Panelists in the group will present academic data from psychologists, gender scholars, and experts studying marriages and families to put their experiences in context and help others realize the overwhelming prevalence of the problems of absenteeism and abandonment children are experiencing from their fathers. The panel also hopes to theorize best practices for retraining men to embrace their inner vulnerability, tap into their emotional awareness and intelligence, and be present and available for the kids they brought into the world.

### **10:40 – 11:40 a.m. | Session B1 STEAM 102: Adapting Medical Science Teaching**

#### **"Relaxed Atmosphere Facilitates Students' Learning"**

Karina Beglova, COM | Advisor: James Mubiru

There is a lack of trained personnel in the medical sciences in America. However, relatively few students are strongly engaged in science courses in precollege. This lack of engagement is especially acute among minority students. One of the ways to alleviate this problem is to connect these students with engaging experiences in ways that excite them, and in a relaxed atmosphere. Sickle cell disease (SCD) is an educative model that can meet the above challenges. The condition is relatively common in minority populations. Many students either are carriers, know someone who is a carrier, or have seen the disease in the community.

At College of the Mainland, we have a student-led organization called the "Sickle Cell Club" which raises awareness of Sickle Cell Disease. The club has recently pioneered a program whereby students design sickle cell-based education modules and use

these modules as education tools in the local middle and high schools. These modules are presented to the middle and high school students in a relaxed, non-judgmental atmosphere by the College of the Mainland students. Our Sickle Cell Club simplified the complex scientific concepts and present them to the students using games and crafts. Since the materials we use are affordable, the program can be scaled up to involve many students. It showed me that I could learn more about a subject through teaching it to younger students. This experience also showed me that cost is not the main issue stopping students from learning, and that even with limited resources students can be taught to love science. Furthermore, it highlighted to me that students learn better with hands-on activities. In summary, we recommend the teaching of science in a relaxed atmosphere that utilizes a variety of hands-on activities. This would help students adapt to the science needs of our country.

#### **"Using Sickle Cell Education Modules to Increase Science Engagement Middle and High School Students"**

Brianna Platt, COM | Advisor: James Mubiru

The United States has a great need for a science workforce for the 21st century, especially in biomedical sciences; however, relatively few students are strongly engaged in science courses in precollege. This lack of engagement is especially acute among minority students. One of the ways to alleviate this problem is to connect these students with engaging experiences in ways that excite them. Employing sickle cell disease (SCD) as an educative model can meet the above challenges. SCD is felt: the condition is relatively common in minority populations; many students either are carriers, know someone who is a carrier, or have seen the disease in the community. SCD is also termed "the first molecular disease" and many scientific techniques were pioneered to understand this disease. I joined the sickle cell club at COM and the club has started a collaboration with the ACE after-school program with the Texas City ISD. Under this program, students at COM develop STEM education modules and use them to tutor and mentor middle school and high school students. I feel that this program is both beneficial to the COM students and the middle and high school students. To the middle school students, it reinforces previously taught scientific concepts and builds confidence in them. To the COM students, this program improves communication and leadership skills. Since the modules are presented by 2-year College students, the Middle, and high school students easily related to them, and this helps the process of demystifying scientific concepts.

#### **"Sickle Cell Club Activism in Texas City Middle and High School"**

Cindy Vargas, COM | Advisor: James Mubiru

The United States has a great need for a science workforce for the 21st century, especially in biomedical sciences; however, relatively few students are strongly engaged in science courses in pre-college. This lack of engagement is especially acute among minority students. One of the ways to alleviate this problem is to connect these students with engaging experiences in ways that excite them. Employing sickle cell disease (SCD) as an educative model can meet the above challenges. SCD is felt: the condition is relatively common in minority populations; many students either are carriers, know someone who is a carrier, or

have seen the disease in the community. SCD is also termed “the first molecular disease” and many scientific techniques were pioneered to understand this disease.

Recently the sickle cell club at COM has started a collaboration with the ACE after-school programs in Texas City ISD whereby COM students develop sickle cell disease STEM educational modules and use them to tutor/mentor middle and high school students in the after-school programs. Preliminary data have indicated that these educational models build confidence, improve self-esteem, increase good study habits, and reinforce previously taught scientific concepts among the students in the after-school program. Since the modules are presented by 2-year College students, the middle and high school students easily relate to them, and this helps the process of demystifying scientific concepts. This collaboration is also helpful to COM students as it encourages students’ higher level of thinking, sense of community, and builds students’ transferable skills like communication, leadership, and accommodation of other people’s needs.

## **10:40 – 11:40 a.m. | Session B2 STEAM 103: Reimagining Complex Human Experiences**

### **“Human Evolution's Modern Medium”**

Bailey Rankin, COM | Advisor: Anna Munson

You are the product of millions of years of evolution. Life’s only goal is to continue. For as long as life has persisted, life has evolved to overcome obstacles. But through human ingenuity, we have all but abolished life’s form of adaption in favor of our own. We no longer evolve. Instead, we inspire. Through the transference of thoughts, we have improved upon the biological constant responsible for all life. Our species is truly unique in many ways; however, the most impressive is its ability to solve problems. Existence is a series of obstacles that life must overcome to endure. Until recently, life persisted through a phenomenon called survival of the fittest. When life encountered a problem, all that couldn’t overcome it died out, while the rest survived, creating a more robust generation. This form of problem-solving is inefficient, painful, and is extremely limited in its capabilities. While we owe our existence to it, we have replaced it with the best tool it gave us. Through our ability to reason and then share those thoughts, we have created a network of minds working to solve any problem. When we encounter an issue, we don’t let it overwhelm the weak and let the strong learn from their inability, we turn to our minds to solve the problem through other means. The COVID-19 pandemic didn’t wipe out all that weren’t immune or strong enough to recover on their own; instead, we used our ability to create and share ideas to find solutions, preventing millions of deaths and ensuring the future for our species. Through my work, I hope to shed new light on how we adapt to the world around us.

### **“The Historical Significance of Howl by Allen Ginsberg”**

Melissa Wells, San Jacinto College - North Campus | Advisor: Cody Pogue

This presentation will go over the impact the poem called Howl had on history and the present. Allen Ginsberg was a poet famous for poems such as Kaddish and Howl, of which his most controversial was Howl. Howl dealt with topics that were considered taboo in the fifties such as gay intercourse and illicit drug use. Despite this, it was considered a voice for a generation called the “beat generation.” This poem was also influential to the LGBTQ community and movement, as Allen Ginsberg was an openly gay man, and this poem was unapologetic about the sections discussing gay intercourse. This presentation aims to discuss those taboos and reflect how at the time it was significant. The historical events that were going on at the time are what made this poem notable. The other goal of this presentation is to show how it affected not only the beat generation but also echoed into other generations. The importance that this serves is how it gave a voice to a counterculture movement that felt voiceless. Not only that, but it is also important to show how powerful poetry can be to later generations and how literature can be impactful on history.

### **“The Backwards Adaptation of Mentally Afflicted Adolescents – and How We Fix It”**

Gabriel Kirkoff, COM | Advisor: Dalel Serda

Nothing is more important to a human than a healthy mind, but in the critically important time of adolescence, we find that a significant population shows signs of mental illness. These illnesses affect the mood and behavior of those affected. Illnesses such as depression, mania, psychosis, and bipolar disorder are bad enough, but to add on, societal stigma and prejudice are prevalent everywhere. Though more difficult for them, people with mental illnesses can succeed if supported. That’s why the period of adolescence, as a crucial time for psychosocial development, is the time to identify and treat these illnesses. Due to the failure of current systems, as well as unconscious and conscious prejudice and stigma by their peers, mentally afflicted individuals suffer from a twisted form of what we call adaptation. The mind is imprinted with stigma and begins to believe it, which can lead to other behaviors. For example, one might believe that their contact with a stigma-riddled society equates to human interaction generally; this leads to distancing and isolation as the mind attempts to relieve itself of pain. I will present thorough detail on the extent of prejudice and stigma against mentally afflicted individuals as well as existing systems of treatment. Following that, I will present the results of an autoethnography study of my own experiences with stigma and prejudice. Finally, I will make a case for the change of systems and societal treatment of behaviorally affected.

## 10:40 – 11:40 a.m. | Session B3 STEAM 105: Fine Arts in Adaptation

### "Beyond Broadway: An In-Depth Analysis of Musical Theatre"

Aidan Jones and Trenton Peterson, Odyssey Academy/COM | Advisor: Anna Munson

Musical theatre. It's such a broad term, but it conjures a vibrant image in people's minds. Why is that? It could be because of its rich, lengthy history. Maybe it's because of the impact it's had on society for many years in the past and will continue to have for many, many years. For over 2,500 years, musical theatre has impacted people's lives. It's progressed in such an unbelievable way. The history of musical theatre can be dated back to ancient Greeks, who had plays of their own, most notably the Tragedies and Comedies. They had key players like Socrates who made their music for said plays. Musical Theatre started to gain most of its popularity in the 1750s namely in New York. Even Broadway plays that are played today can be dated back as far as 1735. In our symposium, we're going to be talking about all of this and even more. We will provide our insight into the past, present, and future of musical theatre. We will talk about what makes certain shows wildly successful versus what makes other shows flop, and the key things that define theatre as a whole.

### "Reimagining History: The Adaptation of Salisbury Cathedral's Floorplan through 3-D Interpretation"

Melanie Heard, Brazosport College | Advisors: Kamillah Campbell and Carrie Pritchett

Located in the Wiltshire plains of Salisbury, England, Salisbury Cathedral was originally built from 1220 to 1258. One of the greatest examples of early English Gothic architecture, it has withstood the test of time as one of England's most important churches and pilgrimage sites both for religious pilgrims and tourists. The Cathedral itself was formed out of adaptation, as a group unhappy with the Bishopric of Old Sarum formed their congregation. The splinter group was responsible for the Cathedral. This research project expanded beyond history to art, as a 3-D model of the cathedral's floor plans was created. Although the Salisbury Cathedral was built of Purbeck marble, the project was constructed from a variety of sizes in popsicle sticks and a massive amount of hot glue. Both the actual version and my model of the church were built on unobstructed sites, clear and open, not blocked by anything. Three layers of popsicle sticks represented the three different floors of the Cathedral, adapted and replaced due to time, wear and tear, and style changes. As the model took shape, it was clear how the cathedral changed over time, and how small architectural changes can force a major reassessment of a structure and its features.

## 10:40 – 11:40 a.m. | Session B4 STEAM 107: Reinterpreting Classic Literature

### "Inner Adaptation"

Kaneburley Rimpler, COM | Advisor: Gwendolyn Barbee-Yow

This is an adaptation from one genre of writing to another I wrote. Emily Dickinson inspired this adaptation with the poem

"Because I could not stop for Death" with the way she allows her protagonist to experience evolution from life to the afterlife. When I read the poem, I intended this story to be about the process of grieving and travel through the five stages of grief, but that's only a small part. I decided to write this adaptation with the theme of evolution. Taking the idea that Dickinson is showing an ebb and flow with the world, transitioning from one stage of life to the next; adapting, if you will. Adaptation can be interpreted in many ways; this is just the way I chose to explore this theme. With the last two years being under extremely strange circumstances and being in lockdown for the first six months of the pandemic, I've had time to do my own adapting. This work reflects this personal adaptation that I went through at the beginning of the pandemic and the process of that. Just as the protagonist of Dickinson's poem parts ways with their life on earth, my protagonist has an interaction with "death" and parts ways with a self that no longer serves a purpose in their life. This is to show a version of evolution that happens daily to humans just like you and me.

### "Reimagining Adventures through Wonderland: Salvador Dali's Surreal Interpretation of Lewis Carroll's Classic"

Breanna Emerson, COM | Advisor: Brian Anderson

In 1865, Lewis Carroll published Alice's Adventures in Wonderland, a peculiar yet whimsical children's book that recaptures the unusual way in which children often view the world: in bright colors, fantastical possibilities, and strange new surroundings. The book and story have grown to iconic status, and the story has been adapted for dozens of new editions, films, video games, and stage plays. More than sixty years later, the surrealist painter Salvador Dali chartered new territory in the art world through his unconventional techniques and a similar focus on controversial and dream-like imagery that, like Carroll's work, served to open up viewers' minds and help them consider new possibilities for how we experience the everyday world. In 1969, the renowned Dali was sought out to provide illustrations for a limited edition of Carroll's beloved and much-reprinted book. Dali ultimately composed 12 intricate illustrations. These illustrations provide a visual adaptation of Carroll's words and verbal images that change how we see the work, essentially helping readers to refresh their sense of the novel as a source of eccentric and colorful imagery. Although Dali's reimagining may be seen as influenced by the 1960s counterculture, the viewer or reader ultimately completes the adaptation through his or her mental pictures and experiences. These dual possibilities of the images as a reflection of childhood wonder or nightmarish dreamscape – or something in between – in turn capture the essence of the original book and its almost bizarre appeal.

### "A Taxi Ride with Death"

Iverson Williams, COM | Advisor: Gwendolyn Barbee-Yow

As times change, we constantly progress as a civilization, bettering ourselves technologically, creating medical breakthroughs, and increasing our overall life expectancy. But as we make these incredible historical advancements, we often forget our past as it cannot adapt and navigate the course of time. In her life, Emily Dickinson wrote many now amazing short poems, such as "I'm Nobody! Who are you?" and "I heard a Fly



buzz-when I died,” but just like many other American poets, is only acknowledged in the school system. This causes the youth to be exposed to exceptional literature before they can fully understand the deeper meaning of its complexity, which in turn creates a negative connotation when exposed to similar works later in life. The Academic Symposium asks the participants to reimagine adaptation. To contribute to the event, I created an interactive horror suspense drama heavily based on “Because I could not stop for Death,” a story in which Emily Dickinson depicts a fantasy encounter with the entity Death after her passing. This project is meant to subliminally expose the player to concepts mentioned in the works of Emily Dickinson and other American litterateurs via the playthrough of a short interactive horror suspense game in an attempt to change the stagnant mindset that American poetry is lackluster.

### **10:40 – 11:40 a.m. | Session B5** **STEAM 115: Effects of Society on Private and Public Selves**

#### **“The Whiskey Rebellion”**

Brian Sharpe, San Jacinto College South | Advisor: Abbie Grubb

The Whiskey Rebellion was a pivotal moment in American history because of the lasting effects it has had on American politics, and the implications it gave for the extensive power newly acquired by the federal government. Many essential questions came from this historical event such as how much power the federal government should be given in the interpretations of the newly ratified constitution and how the American people should choose to balance said power to prevent its overgrowth. It is not a stretch to say that the two main schools of thought, being the federal response to the Whiskey Rebellion was either a government over-reach or a necessary show of power to promote stability and order, are reflective of Federalism and Anti-Federalism: the first American political parties. The Whiskey Rebellion played a vital role in contributing to the formation of post-revolutionary politics due to the statewide presentation of the issue: citizens either supported the rebels or wanted them apprehended. Ultimately, the Whiskey Rebellion showed the American people that while federal power can be daunting, for the welfare of the country, it is necessary for certain situations.

#### **“Rolex’ Urban Ugandans’ Food Adaptation to a Fast City Life”**

Noah Mubiru, Alvin High School | Advisor: James Mubiru

Since the beginning of time, food has had a crucial role in the human experience, deciding where we lived and bringing out human ingenuity. Uganda is a small-land locked country in East Africa that was, until recently, a mainly agrarian society. However, Ugandan society in the last 30 years has experienced rapid change, especially through globalization and the introduction of the internet to the extent that people in the urban areas now live a fast-paced life, just like people in Europe or North America. Many city dwellers now want their daily food needs provided cheaply, quickly, and away from home. Traditionally in Uganda, no food is quick and easy to make, and that provides all the essential nutrients. Traditional Uganda

foods like bean stew and banana plantain, or peanut stew and cornmeal, need several hours to prepare and are best eaten in a home environment. In the last thirty years, Uganda’s urban dwellers have come up with the “Rolex” as an answer to the need for a cheap, fast, and nutritious meal. To many people, Rolex is a well-known high-quality watch brand, but in Uganda, it is used to refer to street food that is made by rolling eggs and vegetables in flatbread. The flatbread itself is an imitation of the “chapati” bread originally from the Indian subcontinent. The “Rolex” has found favor with urban Ugandans because it is cheap, nutritious, and can be eaten on the go, especially during unending traffic jams of cities and towns in Uganda. It can even be eaten while someone is riding on a motorbike taxi. This adaptation is an example of how a change in society’s pace of life combined with the ability of cultures to borrow from each other can create a unique product.

### **10:40 – 11:40 a.m. | Session B6** **STEAM 119: Special Non-Juried Session: Creative Writers’ Reading**

Elaina Gilbertson, Melody Jones, Allie Yarn, Robyn Lechman, Cody Bassett, Kyndal Carter, Cochran, Leah Hunt, Dulce McClure | Advisor: Dalel Serda | This session will be student moderated.

Creative writing demands imaginative and adaptive transformations from authors. Through creative writing, not only do we explore the inner workings of our human condition, but we also immerse ourselves in our unique experiences. The synthesis of these processes is the work. We hope you will join us as we share some of the writing we have been working on this semester.

### **11:50 a.m. – 12:50 p.m. | Session C1** **STEAM 102: Adaptation During COVID Times**

#### **“Advantages of Soymilk in Lessening COVID-19 Symptoms”**

Jodie Manuel, COM | Advisor: James Mubiru

Preliminary data has shown Americans who fall victim to a low socioeconomic status are associated with poor metabolic health issues, such as cardiovascular disease, and are more prone to face acute symptoms from the coronavirus. Because people in or barely above the poverty line have more access to foods high in saturated and trans fats, such foods build up plaque within one’s coronary arteries, reducing oxygen to the heart. With an underwhelming amount of oxygen being transported to the heart and little help from cardiac receptors, the virus more easily attacks the heart and lungs of those diagnosed with heart disease. Yet, with improved nutrition and a diet focused on plant-based foods, many low socioeconomic families with subpar metabolic health issues can bear a lower risk and severity of COVID-19 symptoms. Further, it is highly recommended that such families add soymilk to their diet to improve health and potential complications linked to COVID-19 and heart disease. Soymilk has no cholesterol, and its cost and amino acid profile are comparable to cow milk. An additional advantage of soymilk is that it provides adequate amounts of L-glutamine, an amino acid that has been beneficial in many infectious disease patients. Thus, I assert soymilk is a striking beverage with vast



anti-inflammatory and amino acid properties that are highly beneficial to cardiovascular diseases and other poor metabolic health conditions.

### **"Artistic Creative Activities (ACA) and COVID-19"**

Tania Sierra, COM | Advisor: James Mubiru

COVID-19 made many feel trapped and had a toll on some people's mental health. In hopes of escaping the reality around them, artists, musicians, writers, and everyone, in general, managed their mental health and well-being during the COVID-19 pandemic by engaging in artistic creative activities. This study sought to assess the prevalence and well-being of COVID-19 during the pandemic; in addition to identifying at-risk populations, ACAs were also examined for their role in the regulation of emotion and supporting mental health. In Australia, online surveys that targeted anxiety and depression were administered to members of the general public. In this study, participants reported what ACAs they were taking during the epidemic and ranked the effectiveness of the ACAs they were using. Furthermore, even though ACAs such as "Watching films or TV shows" and "Cooking or baking" are common, they do not rank highly in terms of effectiveness. In contrast, "Listening to music" is not only the most popular but also the most effective ACA. Moreover, the correlation analyses revealed that the most depressed participants were younger, less active during the pandemic, and had a high level of musical engagement. According to the study, mental health and well-being benefitted greatly from the ACAs during the COVID-19 pandemic in Australia, and they may potentially do the same in the future. This presentation will consider this research and other secondary research, along with my own painting experience as it emerged from the pandemic.

## **11:50 a.m. – 12:50 p.m. | Session C2 STEAM 103: Reimagining Justice**

### **"The Impact of the Louisiana Purchase"**

Fabian Cedillo, San Jacinto College North | Advisor: Cody Pogue

The Louisiana Purchase brought great expansion for Americans but was unfortunate for the native people who lived there. For Americans, the result between France and the US brought in shipments of goods, and temporary alliances. However, for natives, this brought destruction, death, and relocation of homes only to them. Natives were largely powerless when they have consistently pushed aside. Natives suffered the most during and after the purchase, which brought Tecumseh's rebellion, and Black Hawk wars. Lewis and Clark led such a pivotal moment of exploration to see what was brought out on the new land, with the help of Sacajawea. Overall, this research shows what people can accomplish with the help of other nations, and what opportunities will be provided, but without repercussions from outsiders.

### **"How to See Tonantzin: An Invitation of Identity and Survival to My Brown Hermanos"**

William Gomez, COM | Advisor: Anna Munson

The majority of Native Americans deny their racial identity. When asked about their race, they prefer to falsely identify with

ethnic terms such as Latino or Hispanic. This phenomenon was established through colonialism. Colonialism is systemic violence that seeks to destroy and exploit a race or ethnicity through a variety of mechanisms. Such mechanisms synergize to incite violence and generally include Racism, Genocide, and Forced Assimilation. These mechanisms can even still be felt today as hierarchies that contain a veiled hatred of Native Americans. Examples of such hierarchies include poverty, delinquency, gang/cartel violence, and Eurocentric beauty standards. If Native Americans do not act and defy these vile hierarchies of colonialism, they will eventually disappear. This is dreadful because to allow the Indigenous American race to disappear is to allow colonialism and Genocide to run their course and win the battle of history. Fortunately, there still exists a chance to undo the effects of colonialism. To stop colonialism, Native Americans must decolonize themselves. Decolonization is best described as the renunciation of forced identities and culture in favor of the celebration and reclaiming of former ones. It allows Indigenous Americans to realize and appreciate their true identities as well as recognize the harmful colonial structures of hierarchy and hate in their society. Through decolonization, Native Americans can adapt and survive colonialism with the reclamation of their true identity.

### **"Exploring the XYY Myth: Genetics and Criminology"**

Amani Khurram, San Jacinto South | Advisor: Abbie Grubb

Criminality and genetics are not necessarily linked together, their relationship is a false misconception derived from the past. Moreover, psychology plays a more crucial role in determining whether a person's intentions and instincts confirm danger or harm to society. Despite the misconceptions about the extra Y chromosome in men, this study disagreed with the theory, analyzing the rate of criminality among several types of men. Men with an extra Y/X chromosome had fewer criminal actions than men with normal chromosomes. Danish national register, draft board records, and other sources provided information about the men. Also, the research group measured each man's intelligence. The research illustrated the almost similar criminal/violent behavior between the several types of men. Yet, the difference between was not significant. The results conclude making assumptions of criminal and violent behavior based on the XYY or XXY chromosome is ultimately false. Likewise, judging a book by its cover. Understanding where a child with this chromosome disorder comes from and helping them grow normally will benefit the child. It also disproves that children with these sex chromosomes are criminals or psychopaths.

## **11:50 a.m. – 12:50 p.m. | Session C3 STEAM 105: Unimagining Bias**

### **"The Objectification of Women: A Philosophical Outlook"**

Ariana Larios, San Jacinto College North | Advisor: Cody Pogue

The differentiation between an object and a subject is simple; the subject uses an object for their gain, and a subject acts upon the object. The notion of objectification occurs when a person treats another as an object without regard to their feelings and

experiences; but does this happen to humans? Philosopher Simone de Beauvoir in her book *The Second Sex* put it this way: “She is defined and differentiated with reference to man and not he with reference to her; she is the incidental, the inessential as opposed to the essential. He is the Subject, he is the Absolute – she is the Other.” Unfortunately, the Patriarchal system we live in today disproportionately views and treats women as objects, as explained by many philosophers of the past, and is expressed negatively through a highly influential avenue: the media. How so? This paper will explore how American society has and continues to impose sexual objectification on women in social media, advertisements, and film. It will do this by considering the history of the development of this concept, the warnings and observations given by philosophers, how the media have perpetuated it, how women today have internalized this idea, the dangers it poses to women and society alike, and what individuals can do to halt its continuation.

### **“Defying the ‘Mythical Norm’ in Marvel’s Eternals”**

Chad Griffin, Lee College | Advisor: Georgeann Ward

In “Age, Race, Class, and Sex: Women Redefining Difference,” Audre Lorde speaks of a mythical norm in America “defined as white, thin, male, young, heterosexual, Christian, and financially secure” (116). This mythical norm is a kind of “ideal” projected by media that is unattainable for most people. In my presentation, I will speak about the stunning Marvel movie *Eternals*, the first Marvel movie with an Asian director, a deaf superhero, and a black man kissing another black man. The film takes the viewers through each of the immortal characters and shows the audience how their race, age, class, and sex affect how other people perceive them. I will expand on how Marvel does not want to conform to that same mythical norm anymore. My presentation will cover how *Eternals* teaches us valuable information about the fallacy of the mythical norm and does so by offering diverse representations and interracial and gay relationships.

### **“The Evolution of Woman’s Rights”**

Carys Ragsdale and Joselyn Leos Fasci, COM | Advisor: Anna Munson

Throughout history, women have had to face many obstacles and alter their surroundings to fit their growing ambitions. It’s a constant war against the oppression of a misogynistic society. Time and time again, women have fought strenuous battles to achieve equal rights. Some of these battles include reproductive and workplace rights. Womanhood was constantly associated with motherhood, and was told their bodies were only meant for procreation. Many laws have been passed and revoked involving access to contraception and abortions. Yet the people making these decisions were men who don’t have an understanding of a woman’s body and struggles. Even after being allowed to take on jobs, inequality found its way into the workplace. They are sexually harassed, and in most places don’t even receive equal pay. While many improvements have been made, the fight continues. Society still feels the effects of the sexist mindsets found in both men and women. However, women have risen and pushed their struggles into the light through literature and education. Women were only expected to maintain a household, but many longed for a proper education to achieve independence. Some women even became authors that are

still idolized to this day. They wrote stories that promoted feminism and offered an alternative to a life of serving a man. In all, women have continued to fight for their place in a society dominated by men.

## **11:50 a.m. – 12:50 p.m. | Session C4 STEAM 107: Adapting and “Success”**

### **“Audie Murphy, Most Decorated Soldier of WWII”**

Anthony Gamage, San Jacinto South | Advisor: Abbie Grubb

Audie Murphy was the most decorated soldier in the Second World War. By the end of the war, he had been awarded thirty-three medals for combat bravery and the highly prestigious Medal of Honor, all before turning twenty. The time was ripe for a symbol of strength and bravery, and the people needed encouragement and a symbol of hope. As a result, he became a “poster child” for the US Army and was paraded around the country. After the war, Murphy became a celebrity acting in forty-four famous movies on the silver screen and in television shows. As a result of his war experiences, like many combat veterans, Murphy developed mental health problems that troubled him for the rest of his life. This plagued Murphy with his own “demons” for the rest of his life. Despite that, or perhaps because of it, it is important to remember the person Audie Murphy was that helped win the war and lift the spirits and hopes of many Americans. My interest in doing this biography was to show the man of Audie Murphy, from his childhood to the soldier, the hero, and the actor.

### **“Balance Between Business and School: Adapting as a CEO, a Student, and Creator”**

Ashley Love, COM | Advisor: Shinya Wakao

This presentation highlights the journey of building my clothing line, Dopest Apparel, while adapting to life’s curveballs and balancing my studies. First, I examine the role my mental health played in the forced adaptation of discovering innovative ways of making money – starting my own business. Second, I explain the adaptation of academic knowledge into my business in a DIY society. Lastly, I give you a glimpse of what the future holds for Dopest Apparel. In 2017, Dopest Apparel was born. I suffered heavily from anxiety and depression, and they truly took a toll on me. I often had a tough time leaving my house, which made it extremely hard for me to keep a job. Consequently, I began to research ways I could make money without having to leave home. As a result of my research, I learned about the concept of drop shipping. Dropshipping was music to my ears. With my brother’s help, I digitized my designs and uploaded them to my website. To accelerate the growth of my brand, I decided to learn business at college, which allows me to have a hands-on approach to learning. In an accounting course, I learned how to obtain copyrights for my brand. I also learned the importance of operating my business with an LLC. In microeconomics, on the other hand, I learned the concept of trade-offs. Everything we do in life comes at a cost. As for the future of my business, my goal is to open a boutique. I plan to host pop-up shops to display my products. My brand will inspire others who have persevered from similar hardships. And who knows, by faith, there will be a

franchise of Dopest Apparel stores in malls across the country. It is only crazy until it happens.

### **“The Effects of Mental Health on Student Success”**

Jennifer Freyaldenhoven, Maressly Garcia, San Jacinto Central | Advisor:  
Judith Maima

Studies have shown that mental health can play a significant role in the success of school-aged students. Unfortunately, poor mental health specifically can have a profound impact on student success. Poor mental health can be generated in many ways that can range from something as simple as deficient sleep habits to something a bit more complicated, such as personal trauma. There are a plethora of factors that have a direct effect on one’s mental health; not just in the negative sense, but in a positive one as well. Just as there are many negative contributors, there are also plenty of positive factors that can contribute to a healthy state of mind. Over the past few months, we’ve conducted research on several topics regarding their contributions to mental health; our findings will be used to explore what we can do as educators to nurture the minds of future generations. We hope our research will aid in forming a better understanding of the subject to increase the likelihood of the overall success of school-aged students.

## **11:50 a.m. – 12:50 p.m. | Session C5**

### **STEAM 115: University of Houston Doctoral Student Showcase:**

#### **“What’s it Like to Be a Graduate Student?”**

Patrick Stockwell, Literature & Creative Writing Ph.D. student  
Ann O’Bryan, Literature & Rhetoric, Composition, Pedagogy Ph.D. student  
Leah Fretwell, Literature & Creative Writing Ph.D. student

This special session will feature current doctoral students in their first year of doctoral studies at the University of Houston. Come hear about their academic journey and academic and creative projects. The featured students are Patrick Stockwell, Ann O’Bryan, and Leah Fretwell. **Patrick Stockwell** is an Inprint MD Anderson Foundation fellow and Ph.D. candidate in fiction at the University of Houston. He holds an MFA from New Mexico State University and is the author of *The Light Here Changes Everything*, winner of the 2018 Clay Reynolds Novella Prize. **Ann O’Bryan** is a first-year Ph.D. student with a concentration in rhetoric, composition, and pedagogy. Her research centers on service learning in the composition classroom with a focus on marginalized populations and prison pedagogy. She has been teaching at the community college level for eight years. **Leah Fretwell’s** work has appeared in *Cream City Review*, the *Southern Humanities Review*, and elsewhere. She is an Inprint Mary Gibbs and Jesse H. Jones Fellow, and is a first-year Ph.D. candidate in Literature and Creative Writing at the University of Houston.

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Professors Dalel Serda and Shinya Wakao  
GCIC Academic Symposium Co-Chairs



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