GCIC ACADEMIC SYMPOSIUM 2020

# MINING

MARCH 2020

9AM-2PM STARTING IN LRC 131

G.C.I.C.

COM College of the Mainland

# WELCOME

#### **Professor Dalel Serda**

GCIC Academic Symposium Chair

Professor Dalel Serda works to offer students opportunities to engage in inquiry-driven undergraduate research that contributes to ongoing, cross-disciplinary conversations. She is a proponent of helping students gain habits of mind that foster self-regulation both inside and outside the college classroom. She hopes providing students a platform like today's symposium will help them gain the authority and know-how necessary to pursue long-term learning and civic engagement.

#### Dr. Shinya Wakao

GCIC Academic Symposium Co-Chair

Dr. Wakao's research interests are political economy and voting behavior. His recent working papers cover voting behavior among Hispanic voters, campaign contributions and gerrymandering. In his course, Dr. Wakao introduces a variety of data and academic research in order to teach students how politics are related to every student's life as well as the importance of analyzing political phenomena objectively.

# to College of the Mainland's eighth Gulf Coast **Intercollegiate Consortium Academic Symposium 2020!**

We live in uncertain times. Yet, we have a propensity to feel with unease the prevailing uncertainty of our times whatever our times may be.

And though it seems there's much evidence to suggest that we do live in precarious times, in dangerous times, there is overwhelming evidence that these are also exciting times; we are perhaps too at the inception of a more caring, thoughtful, inclusive world.

We know what we have always known: the past leaves its indelible teeth on our present; our human footprint is too deep, too wide, too permanent; that which eludes us cycles back eventually. The long-term good takes more effort, more cunning, more compassion; that which is nearer can be sexy with ease, urgency fosters action, and action can be good or the opposite, explosive.

So how do we proceed? How do we—the students, members, and leaders in our community—move forward? We suggest we must pause to take in the landscape, to plot our path, to have a plan, to analyze ramifications, to arm ourselves with heft, might, thought, and heart.

We conclude this: We must be brave. We must move forward in earnest. We must prevail above fear, above brayado, above ignorance, above greed. We must unite as a community to mine the unknown, to invest in the present with feet concretely in the image of a better future.

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 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 concerning the theme.

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

9:00 a.m. – 9:20 a.m.	Overview of Day's Events: Professors Dalel Serda and Shinya Wakao, GCIC Academic Symposium Co-Chairs	LRC 131
9:30 a.m. – 10:30 a.m.	Session A1: Forces that (De) and (Re)Construct "The Path to Re-humanization" Ashley Pretty, COM   Advisor: Dalel Serda	LRC 213
	"My Life in His Hands: Psychological Manipulation Within Relationships" April Carrisalez, COM   Advisor: Dalel Serda	
	"Railways in 'Lady Audley's Secret' During the Victorian Era" Alexandra Hallberg, University of Houston   Independent Scholar	
9:30 a.m. – 10:30 a.m.	Session A2: Colliding Cultures, Histories, and Politics "Lost Ink in Indian Pride: Mining the Unknown Knowledge of the 'Praying Indians' of Massachusetts" Madeleine Lowery, Brazosport College   Advisor: Carrie Pritchett	LRC 255
	"Voter Turnout in Texas: A Disappointing Present or a Hopeful Future?" Kyle Ortiz, COM   Advisor: Nathan Goldman	
	"Kenya's 'Vision 2030' Plan: Mining the Economic Unknowns, From Post-Colonial Poverty to Economic Prosperity" Gilbert Mwihaki, Brazosport College   Advisor: Carrie Pritchett	
9:30 a.m. – 10:30 a.m.	Session A3: Mining Oppressive and Empowering Forces "A Change for the Black Male"	LRC 212B

A'nyah Joseph, COM | Independent Scholar



	"How Black Panther Rejuvenates Identity Otherwise Suppressed in Aphra Behn's <i>Oroonko</i> : or, <i>The Royal Slave</i> "  Arreon Allen, COM   Advisor: Dalel Serda	
9:30 a.m. – 10:30 a.m.	Session A4: Mining (Real and Imagined) Perceptions "The Unknown Legacy of Francisco 'Pancho' Villa: Populist Hero or Common Criminal?" Lilia Estefania Barba, Brazosport College   Advisor: Carrie Pritchett	LRC 257
	<b>"Oh SNAP, I cannot receive it!!"</b> Rosecel Robles, University of Houston-Clear Lake   Advisor: Shinya Wakao	
	"Tulpamancy: Imaginary Love" Michael Scroggins, University of Houston-Clear Lake   Advisor: Kenneth J. V. Kratz	
10:35 a.m. – 11:35 a.m.	Session B1: Science as Salvation? "Exploring the Effects of Epigenetics" Jonessa Nichole Eustaquio and Mario Ramirez, COM   Advisor: James Mubiru	LRC 213
	"Power to the People" David Villarreal, COM   Independent Scholar	
	"The Chemistry of Global Warning: The Unknown Future of Our Earth" Aurora Goodrum, Brazosport College   Advisor: Carrie Pritchett	
10:35 a.m. – 11:35 a.m.	Session B2: Documentary Film Showing and Roundtable "Ava Duernay's Documentary 13th: Injustices and Systemic Racism in America" Moderators: April Carrisalez and Jillian LeMaire, COM   Advisor: Dalel Serda	LRC 255
10:35 a.m. – 11:35 a.m.	Session B3: Mining Education "A Fork in the Academic Road" Fatimah Beydoun, University of Houston-Clear Lake   Advisor: Mike McMullen	LRC 257
	"The Lack of Understanding and Appreciation of Higher Education: Mexican Immigrant Communities in the Gulf Coast" Mayra Martinez, COM   Advisor: Dalel Serda	
	"How Important are the Arts for Scientific Innovations?" Ada Jaramillo, COM   Advisor: David Hatch Burks	
10:35 a.m. – 11:35 p.m.	Session B4: Arts in Action  "Getting into Meme-stream"  Christofer Morales, Lee College   Advisor: Georgeann Ward	LRC 212B
	"The Play Boanthropy, From Script to Stage: The Importance of Theater and Social Issues" Rocky Banks, COM   Advisor: H. Russ Brown	
	"Acting Done Right: Theater and How it Puts People First" Melissa Urness, COM   Advisors: Patricia Ovesny and Bernie Smiley	
11:40 p.m. – 12:40 p.m.	Session C1: Probing Meaningful Human Existence "The Wife of Bath's Tale and Prologue: Satire as a Form of Advocacy"  Jillian LeMaire, COM   Advisor: Dalel Serda	LRC 255
	<b>"Eudaimonia: Its Modern Relevancy and Adaptation"</b> Cody Grace, COM   Advisor: Stacey Burleson	
	"Kaleidoscope Dreams and the Human Experience" Mia Brown, COM   Advisor: MJ Emig	
11:40 p.m. – 12:40 p.m.	Session C2: Mining the Body's Unknowns "Sickle Cell Trait and Athletics" Aimee Estes, COM   Advisors: James Mubiru	LRC 257
	"A Brief Study Behind Electrocardiography"  Joseph Ponce de Leon, COM   Independent Scholar	
	"Chronic Traumatic Encephalopathy (CTE): Mining the Unknowns of the Science of Head Injuries" Justin Peel, Brazosport College   Advisor: Carrie Pritchett	
11:40 p.m. – 12:40 p.m.	Session C3: Creative Writers' Reading "Writing Unknowns: Exploring Mystery and Belief Through Creative Writing" A selection of students from this semester's Creative Writing class at COM will be featured at this reading: Featured writers include Ashley Tompkins, Elissa Kovacevich, Zion Luerson, Joseph Palm, and Skyler Doucet.   Moderator: Brian Anderson	LRC 213
12:50 p.m. – 1:45 p.m.	Complimentary Lunch and Keynote Talk and Q & A: "Life in Simulated Space" Andrzej Stewart, Johnson Space Center	LRC 131
1:45 p.m. – 2:00 p.m.	Awards and Wrap-Up	LRC 131





#### STUDENT PRESENTATION ABSTRACTS

In order of scheduled presentation; please see presentation schedule above. NOTE: These abstracts have only lightly been edited to preserve students' intellectual property and authenticity.

#### 9:30 a.m. - 10:30 a.m. | Session A1:

#### Forces that (De) and (Re)Construct | LRC 213

Ashley Pretty, COM | Advisor. Dalel Serda

#### The Path to Rehumanization

In her novella, Oroonoko, Aphra Behn attempted to align the proto-feminist social cause and the anti-slavery cause in an effort to rehumanize the enslaved. Other critics state that Behn stripped characters of color of their authentic selves or their "color" by giving them features that are not predominantly theirs. This raised the question as to why. After analyzing the story, it was apparent that Behn attempted to make her protagonist, Oroonoko, more European in appearance while keeping his dark skin. My research and argument thus centered on concepts of rehumanization and empathy; by considering these ideas, it became apparent that Behn used European features to describe the enslaved African prince, Oroonoko, in an effort to help readers feel a connection with Oroonoko. This was Behn's attempt to help readers empathize with him. Through these findings, it became evident how people can go from dehumanizing a group of people, to rehumanizing them that stretches beyond the reading experience and engenders real life action. In my presentation, I will propose that by following a specific order of actions, we can begin rehumanizing others when we have by chance dehumanized and/or objectified them. I will analyze Aphra Behn's text using this idea of dehumanization to re-humanization in order to mine the unknown of the past and present. This will improve society today through demonstrating how we can rehumanize those from which we have previously boxed ourselves away.

#### My Life in His Hands: Psychological Manipulation Within Relationships

April Carrisalez, COM | Advisor. Dalel Serda

There is a lack in research covering psychological manipulation within relationships. In using my own experiences, I will contextualize the manipulation that leads to sexual assault and post-traumatic stress. The research will explore the long-term effects of sexual assault and manipulation on preteen victims. It will center on naivety surrounding a lack of experience in preteens. The research will attempt to document my thinking at the time of occurrence and throughout the abusive relationship. I will discuss the wantedness of first occurrence of sexual relations, connections to the assailant, effects of intimate partner violence, and symptoms of post-traumatic stress.

One of the many experiences that came from my abusive and manipulative relationship was sexual assault. Often, survivors of sexual assault are afraid to come forward. Victims trapped in physically and mentally abusive relationships are left feeling alone in an endless cycle of abuse from which they can't escape. In my case, I was gaslighted, or made to distrust my own experiences, and thought nobody would believe me. I also feared the repercussions that would come with sharing my story, making my already traumatic situation worsen as it led to me leaving my post-traumatic stress symptoms untreated. By opening up about my experiences as a sexual assault survivor, I hope to contribute positively to the movement and illuminate the trauma that's been kept in the dark in order to minimize the stigma surrounded around survivors like me. During this work, I mined my unknowns and concluded that knowing comes from acknowledging, overcoming, and articulating.

#### Railways in Lady Audley's Secret during the Victorian Era

Alexandra Hallberg, University of Houston I Independent Scholar

In Mary Elizabeth Braddon's novel, *Lady Audley's Secret*, the story focuses on the mystery of a character that is missing. This novel, published in 1862, shows a shift in mobility due to the fairly new invention of railways. The trains provided an abundance of opportunities for women during this era, and the reader sees this through Lady Audley's character. Women could move to new towns for a chance of better employment and overall

better living. In contrast, trains had unforeseen consequences on an individual's physical as well as mental state, which is seen through Robert's character. Through Robert's constant use of the railways, he obtained monomania from his ongoing search for his missing friend. Railways also caused a shift in the intimacy of travel. Trains caused travel to change from something that, in the past was typically done in groups, to now become increasingly individualistic. In this presentation, I will show through Braddon's novel and additional research that the new invention of railways challenged social codes, caused instability of one's identity, and became the contributing factor in Robert's character going mad. This project correlates with the theme of mining unknowns through the new advancement of travel which had both positive and negative results.

### 9:30 a.m. - 10:30 a.m. | Session A2:

#### Colliding Cultures, Histories, and Politics | LRC 255

#### Lost Ink in Indian Pride: Mining the Unknown Knowledge of the 'Praying **Indians' of Massachusetts**

Madeleine Lowery, Brazosport College | Advisor. Carrie Pritchett

The hidden records and unknown knowledge of much of Native American history still persists to this day. In religious history, their plight is usually overpowered by the immigration of European settlers during the colonial period of the future United States. Religion was a powerful tool for the settlers in subjugating Native Americans. The Pilgrims and Puritans of New England both considered missionary work as an important part of their new lives, and they were eager to attempt conversion of Native Americans. Calvinist theology clashed with animism and the sacredness of nature as a foreign view was attempted to be forced upon the Native Americans. This presentation addresses the spiritual lives of the Native Americans pre-European colonization, and the scars left from aggressive missionary work by the European settlers. This history tends to get lost in the story of the making of the United States, yet it is an important aspect of our history that should be addressed.

#### **Voter Turnout in Texas: A Disappointing Present or a Hopeful Future?**

Kyle Ortiz, COM | Advisor. Nathan Goldman

The great State of Texas is the second largest in both land mass and population. Its size, diversity, and a myriad of other qualities make for a unique political atmosphere. Although these qualities have the potential to make politicians highly competitive and engaged with a vibrant community of voters, in actuality it is quite the opposite. The Lone Star State has a long history of dismal voter turnout. Problematically, this not only at the local and state level and not only unique to Texas but is the case at a national level. My goal is to investigate the largest factors that hinder voter turnout. These include: the barriers that people face when registering to vote and their ability to get to the voting booth, the rate at which people of different ages and races vote, and the unique challenges and reasons each of these demographics have that impact their desire or ability to vote. Delving into these unknown factors will, hopefully, reveal possible solutions. I will be doing my best to share what I have learned thus far. This project is ongoing.

#### Kenva's 'Vision 2030' Plan: Mining the Economic Unknowns. From Post-**Colonial Poverty to Economic Prosperity**

Gilbert Mwihaki, Brazosport College | Advisor. Carrie Pritchett

After long-term colonial rule by the British, Kenya received its independence in December 1963. Since its independence, Kenva's government has focused on economic improvement for its citizens.





After independence there were many unknowns regarding the type of economy that Kenya would adopt. The struggles of moving toward independence brought many unknowns on how to survive without British oversight, and how to create a self-sustaining economy that would benefit the population. This research explores the question of the specific actions that the Kenyan government has taken toward accomplishment of its "Vision 2030" plan for further economic growth, the major breakthroughs and setbacks that have occurred with the program, and how the program can develop a market-based economy. There have been successes and setbacks in the success of the marketbased economy, yet Kenya is a very resourceful nation capable of achieving its economic goal in the coming decades. With almost half of the population living in poverty, Kenya's "Vision 2030" plan aims to make Kenya a middle income nation by the year 2030 and to further eliminate the root causes of the poverty.

#### 9:30 a.m. - 10:30 a.m. | Session A3: Mining Oppressive and Empowering Forces | LRC 212B

#### A Change for the Black Male

A'nyah Joseph, COM | Independent Scholar

The African American male is one of the most incarcerated persons in any group of people that have been indicted into the prison system. While arguably there are some problems that black males create for themselves that lead them to be incarcerated, there is much blame to be put on the justice system itself. In Texas alone, every 1 in 20 black males can expect to be sentenced to prison. An African American male is susceptible to be incarcerated 6 times more than a white male. The average sentence for a black male is around 20 percent higher than a white male. This means that 71,908 black men can expect to be captivated behind cells because of the American jail system that has been around longer than most jails. A system that might have worked when America began is somehow still expected to work now, after centuries passing. With every change that has been made in government systems, the criminal justice system has had minimal changes to its way of operating. There are obvious problems with the justice system used today and there have been no public proposals that have been seriously taken into consideration to fix the problems within it. I propose we start over completely from the beginning; tear down the entire justice system as it is and rebuild it up from the beginning on solid, equal grounds; then work from the inside out to fix problems like bias. When we start over completely having no formal standards of law and build from there, we provide ourselves an opportunity that could possibly lower the cycle of black males being imprisoned so as to not repeat the past while trying to move forward and do better in the future.

#### **How Black Panther Rejuvenates Identity Otherwise Suppressed in Aphra** Behn's Oroonko: or, The Royal Slave

Arreon Allen, COM | Advisor. Dalel Serda

What I intend to explore to "mine the unknown" relates to the revitalization of black consciousness through pop culture. Aphra Behn's Oroonoko, or The Royal Slave, is an artifact of fiction from the 1600s that reminds readers of the emotional and cultural suppression of Africans through its main character, Oroonoko. The narrator and author, Behn, attempts to assimilate Oroonoko into a society built upon colonialism, and this not only suppresses Oroonoko's identity, but devalues his entire being as well. On the other hand, modern films like Marvel's Black Panther are refreshing for the collective black consciousness from around the world. Aided by the unapologetic showcase of afrofuturistic subject matter, the film acknowledges the true beauty and relevance of blackness, completely contrasting Aphra Behn's—and society's—willful ignorance and biases.

Unfortunately, it is within human nature to divide ourselves for a sense of competition or superiority. We point out our differences or the "other" within us and seek to qualify the value of those differences. Yet we also have the capacity to sympathize and understand that we are all valuable. Reinforcing that ideology, films that embrace black exceptionalism like Black Panther, attempt to heal the wounds of slavery in a postcolonial world where society still grips onto the wickedness of the past.

#### 9:30 a.m. - 10:30 a.m. | Session A4: Mining (Real and Imagined) Perceptions | LRC 257

#### The Unknown Legacy of Francisco 'Pancho' Villa: Populist Hero or Common **Criminal?**

Lilia Estefania Barba, Brazosport College | Advisor. Carrie Pritchett

Francisco "Pancho" Villa helped to define the Mexican Revolution. How he defined the Revolution, however, has been debated by historians for over a century. For some, he was a Robin Hood figure who helped to protect the Mexican people against the forces of dictatorship. For others, he was a ruthless criminal who used the Revolution for his own means. Historians still search for many unknown elements of "Pancho" Villa's true motivations for his actions during the Revolution. Was his violence against his fellow countrymen and American soldiers and citizens justified? Was he truly a friend to the Republic of Mexico, or someone who hindered the country's progression? Villa and his actions will be analyzed from various points of view: hero, villain, and traitor in World War I. Using primary documents of the period, these actions of Villa are examined to determine his agenda, the myths and realities of his actions, and his ultimate place in the history of the Mexican Revolution.

#### Oh SNAP, I cannot receive it!!

Rosecel Robles, University of Houston-Clear Lake | Advisor. Shinya Wakao

Our county has a unique political system - federalism. Because each state has a different political culture, industry, and population, each state government creates its own constitution, laws, and regulations. For example, some states allow recreational marijuana but other states prohibit it. In Texas, if you want to graduate from a public college or university, you have to take federal and state government courses.

We can find diversity of public policy not only in state-funded programs but also in federal-funded programs such as the Supplemental Nutrition Assistance Program (SNAP, or food stamps). Why can my friend receive food stamps but I cannot, even if our age and income level are the same?

In this study, I first summarize the current situations of federal and statefunded programs for helping lower-income families. Second, I analyze what determines one's eligibility of receiving government services in terms of state economy and politics. Finally, I propose how we should improve our support systems for low-income families.

#### **Tulpamancy: Imaginary Love**

Michael Scroggins, University of Houston-Clear Lake | Advisor. Kenneth J. V.

Tulpas are imaginary characters that exist within the user's mind and usually take the form of a fictional character. These imaginary personalities, if cultivated, can take the form of auditory, visual and even tactile stimuli, as well as think along-side the host's cognition. Tulpamancy is the act in creating a Tulpa and involves various forms of meditation, hypnosis and empathizing. Contrary to popular belief, research shows Tulpamancy does not induce psychopathology, but is correlated in individuals that were diagnosed with conditions before Tulpa creation. Furthermore, Tulpas cannot 'take over' a mentally stable host's body without the user's intent.

Tulpamancers have reported neutral or positive effects to their mental health as well as improvement in general mood. The main reason for Tulpa creation, shown in research and interviews, is companionship, selfimprovement, and curiosity. This presentation will present the blurred lines around the relationship of Tulpamancers and their Tulpas. This presentation will use anecdotal stories and interviews, research on Tulpamancy itself, as well as the author's personal experience. Research will be used to illustrate





what Tulpamancy is and dispel myths about the practice, prove its intentions and authenticity, and the brief history of the practice from its Buddhist roots to modern day practice.

#### 10:35 a.m. - 11:35 a.m. | Session B1:

#### Science as Salvation? | LRC 213

#### **Exploring the Effects of Epigenetics**

Jonessa Nichole Eustaquio and Mario Ramirez, COM | Advisor. James Mubiru

Throughout our lifetime it is highly evident that we are in constant development. Apart from our physical growth, such as height or weight, we may experience changes at the chemical level, more specifically, modifications in our genes. At the moment we are conceived, chromosomes begin to exchange between our mother and father's chromosomes, thus, in turn making a specific and unique genetic makeup, known as our genome. One may believe a pair of identical twins are carbon copies of each other in every aspect due to their identical genetic material, although this bears scientifically unsound through the discovery of epigenetics. Epigenetics serve to control the expression in which our genes are presented. Although these identical twins may look exactly alike to the human eye, the usage of epigenetics prove otherwise. Epigenetics work to suppress or promote certain genes in our body, and our daily decisions can alter which gene an epigenome will affect. The habits that we adopt such as, diet, stress level, physical activity, and exposure to toxins such as, cigarette smoking, alcohol consumption, or frequent usage of tanning beds can negatively affect our health or even to the extent of our children and future generations. Therefore, the actions performed within each identical twin characterizes their individuality. Epigenetics is a newly discovered and ever-changing phenomenon. The control of our genetic traits is yet to be introduced or understood by many, awaiting its penetration, making it a perfect candidate for the theme of "mining unknowns."

#### **Power to the People**

David Villarreal, COM | Independent Scholar

For too long we have stood by and let big corporations not only withhold electricity from people but also not offer a helping hand to the less fortunate. This global crisis effects many of our third world countries. We need to band together in order to provide people an affordable cost for the basic right to electricity. With this proposition many questions naturally come up. How can we make electricity affordable, mass produced, and accessible to everyone? The answer I propose is Fusion Energy.

Fusion energy is a possible solution to our current energy crisis. I'll explain how we can manage it efficiently and affordably. I will also provide an insight to the benefits and possible hazards that fusion brings. Allow me to bring you into an unknown utopia in a realistic way. Iter states, "A fusion reaction is about four million times more energetic than a chemical reaction"; it could also bring a clean way of producing it. Sixty-three percent of the world's energy consumption is created by fossil fuels. Fossil fuels aren't only depleting but also harmful to the planet.

We could open new doors that humanity has never seen before. With the help of Lithium and molecules in the water that covers seventy-one percent of earth, we could provide and educate many of the developing countries. We could help families around the world no longer worry about whether they will have enough power to warm their houses during the winter. A brighter future is in the palm of our hands, and we must grasp it.

#### The Chemistry of Global Warning: The Unknown Future of Our Earth

Aurora Goodrum, Brazosport College | Advisor. Carrie Pritchett

Chemistry is at the core of understanding global warming and the role of anthropogenic activity as the direct and indirect cause of this crisis. This crisis affects every part of our world: rising water levels, extreme weather, agriculture, and a myriad of things that are critical to daily life. Chemistry is a critical tool to find methods to combat global warming, and to research means of minimizing or ending the continuation of this worldwide crisis.

Through a study of the major gasses and chemical reactions involved in global warming such as chlorofluorocarbons, methane, nitrous oxide, sulfur dioxide, and tropospheric ozone, chemistry is a critical method of "mining the unknowns" of the human factor in global warming. The unknown factors of how these gasses effect the environment can be uncovered through the use of chemistry, and the study of chemical reactions. This study shows that these chemical reactions are strongly influenced by causes that can only be explained by direct or indirect human activity.

#### 10:35 a.m. - 11:35 a.m. | Session B2: **Documentary Film Showing and Roundtable | LRC 255**

#### Ava Duernay's Documentary 13th: Injustices and Systemic Racism in **America**

Moderators: April Carrisalez and Jillian LeMaire, COMJ Advisor. Dalel Serda

Upon the abolishment of slavery, it was assumed that all was set right with people of color. Yet the 13th amendment only made a different form of slavery legal: imprisonment due to systemic racism. Systemic racism is the oppression of people of color in institutionalized systems, including but not excluded to the prison system. According to scholars Rebecca Hetey and Jennifer Eberhardt, Black Americans made up nearly 40% of the nation's inmates despite being only 13% of the U.S. population.

The police system in America in 1865 was rigged against Black Americans and was driven by racist forces. Black Americans were, and continue to be, victims of racial profiling. Due to the economy of the South's dependency on slavery, America was left to shift its dependency to the prison system as a means of compensating for the economic loss. This caused a prison boom where people of color would be arrested for very small offenses, such as loitering and vagrancy. In addition to this, prisoners were treated as subhuman and the prison system continued to make slavery legal.

We will be showing the documentary 13th followed by a roundtable discussion. The documentary addresses the 13th amendment, the aftermath, and racism during the 19th century to now. In this non-juried roundtable session, we will be mining the unknowns of inequalities in the criminal justice system to inform people of the impacts of institutionalized racism through our criminal justice system.

NOTE: This session is non-juried.

#### 10:35 a.m. - 11:35 a.m. | Session B3: Mining Education | LRC 257

#### A Fork in the Academic Road

Fatimah Beydoun, University of Houston-Clear Lake | Advisor. Mike McMullen

For many university students, picking their degree major is an exciting step in defining their future and what they care about. However, for some of those students, that step is influenced by the implicit and/or explicit gendered expectations of their guardians. These expectations pose pressure on the students to answer the question: which should my major fulfill: my dreams or my parents' dreams for me?

The students' response to that question will vary from case to case. Previous research from the journal The Career Development Quarterly, suggests the influence of gender norms and stereotypes is present for Chinese students who are making a career choice. Those students face confines such as the idea that a female is not cut out for high-risk masculine careers like firefighting or police work, and the notion that it is inappropriate for a male to pursue nursing or teaching.

Therefore, to further investigate these concepts' influence, I will be





conducting surveys that test whether parents' gendered expectations affect students' choice of major, and whether the students are satisfied with their ultimate decisions. The purpose of this research is to aid future students with navigating the gendered pressures placed on them, helping them establish a clearer vision regarding which road to take, and ultimately mine their future.

#### The Lack of Understanding and Appreciation of Higher Education: Mexican **Immigrant Communities in the Gulf Coast**

Mayra Martinez, COM | Advisor. Dalel Serda

The ever-expanding Hispanic population in the United States has low achievement rates in higher education. Between 2012 and 2018, in Texas, Hispanic's enrollment in higher education varied from 32.5% to 42%. In 2019, the percentage of Hispanics enrolled at the College of the Mainland was about 34%. However, nationwide only 26% obtain a certificate or associate degree, while about 21.1% transferred to a 4-year degree. The graduation rate of the Hispanic population in higher education is about 18% yearly. Additionally, many Hispanic households have a low-socio economic status. Problematically, 35% of the young Hispanic populations do not finish high school while about 58% of Hispanic students do not attend college/university after finishing high school. For decades the Hispanic population has remained one of the lowest educated populations in the United States although the population increased by 52% in the last ten years. To Hispanics, earning an associate or bachelor's degree could represent a way out of low socio economic status and an increased quality of life. But what are the major obstacles? What are the reasons why so many Hispanics do not pursue higher education? How much do ethnicity and/or culture influence the decision to attend higher education? How much does Hispanic ethnicity and culture affect academic life? As a Mexican immigrant myself, the statistics noted above made me curious about the Mexican immigrant Hispanic subgroup in our community. I wanted to know whether this specific subgroup followed similar trends or varied. Utilizing local community participation, I used qualitative data gathering to explore factors affecting Mexican immigrant population's presence in higher education. After completing the interviews and data analysis, I found evidence to demonstrate that local Mexican immigrant families do not seem to prioritize attaining higher education above other priorities. The two major barriers this community faces are low socioeconomic status and gender-based cultural beliefs.

#### **How Important are the Arts for Scientific Innovations?**

Ada Jaramillo, COM | Advisor. David Hatch Burks

Living in the 21st century represents living a life revolved around innovation, inventions, and creations. There have been numerous technological revolutions dating back to the 1800s. As the technological revolution moves forward, our world changes with it. Today, more than ever, the acronym STEM (science, technology, engineering, and mathematics) is pushed into our education system across the globe, with a hope to influence the minds of young ones in their future careers. This indirect control held over students starts as early as preschool. With this constant surveillance over young learners, are schools killing creativity? Some argue that STEM lessons naturally incorporate the arts and any other subject. However, others will say that if the arts are not actively encouraged, innovation will struggle to flourish and many potential scientists, engineers, and mathematicians will not reach their true potential. This leads to the introduction of STEAM, with the addition of Art, and STREAM, adding reading and writing onto that. These acronyms are both children to the philosophy that without an aptitude to innovate and write at the same level as the other subjects, students can not perform higher order actions in the real world. Though not downplaying the fundamental subjects, it is hard to argue that creative ability is not necessary in addition to and an extension of base knowledge.

Putting aside all the overwhelming acronyms, what we fail to see is the importance between the link of all the academic subjects and how they contribute to one another. The key word here is integration. Jobs in the real world are multidisciplinary. The question remains of how to educate students to develop diverse skills and a passion for exploration and growth.

#### 10:35 a.m. - 11:35 a.m. | Session B4: Arts in Action | LRC 212B

#### **Getting into Meme-stream**

Christofer Morales, Lee College | Advisor. Georgeann Ward

Memes are the very representation of internet culture and over the last few decades, have been shown to take many forms through pictures, videos, slangs, quotes, and even games. The term was coined by Richard Dawkins in his book, The Selfish Gene, in which he used to describe the passing of ideas. Nowadays the word meme is most recognized for funny pictures seen on social media. Memes have become an important staple of western culture and has become a phenomenon that only continues to grow in the present and future. The continuous development of memes through their accessibility from the internet creates a new paradigm of ideas that are powerful and influential embodiments of the new era of media culture.

#### The Play Boanthropy, From Script to Stage: The Importance of Theater and **Social Issues**

Rocky Banks, COM | Advisor: H. Russ Brown

The presentation will explore the making of the play Boanthrophy, written by Hunter Wayne Morris, which was a COM-produced Lab Show staged in February 2020. The play is a story about a High School student who is dealing with the aftermath and fallout from a school shooting in which he was a witness to the loss of his best friend, who was also the shooter. The playwright is an alumnus of Santa Fe High School as well as an alumnus of College of the Mainland. Thus, in a very unique theatrical moment, an entire full-length play was written, directed, technically produced, and performed by College of the Mainland. The presentation will explain techniques on how the show was directed, built, and performed, as how the cast mentally and emotionally connected to the show.

Along with the process of how the play was directed and performed, we will explore some of the local, national, and global social issues that are discussed within the play. The issues include mental health, gun control, violence in schools, suicide, even political ambition. Along with the issues discussed within the show, discussion can be made for the importance of theatre in society: how it reflects life, shapes lives, and opens conversations about possibilities. When we consider how the immersion of seeing a performance or participating in a performance, we have relatively safe venue for asking what if?

#### **Acting Done Right: Theater and How it Puts People First**

Melissa Urness, COM | Advisors: Patricia Ovesny and Bernie Smiley

For many years, theater has been used as a platform for communication. The way theater allows us to communicate on stage is undervalued, since it has been used as a medium that advocates for social progression and change. Federal funding for theater in America boosts the power to help people articulate their thoughts and feelings by shedding light in areas of society that struggle and need representation, showing complexity of human emotions and identities, diversity in race and culture, or highlighting political affairs. It is imperative for theater programs to be federally funded because theater is like a mirror that can show us aspects of ourselves in ways we might not know or want to acknowledge.

Theater is an integral part of history because it has been used as a tool to show the best and worst sides of human conditions. For instance, under the Federal Theatre Project, a play "One Third of a Nation" covered themes of poverty and the housing crisis people suffered during the Great Depression. A play called Fairview was supported by the National Endowment for The Arts, winning the 2019 Pulitzer Drama Prize for its contents of racial prejudice and power dynamics. From agencies like the Federal Theatre Project to the National Endowment for The Arts, funding has helped





communities have easier opportunities to make important emotional connections towards other people and social issues. Above all else, theater inspires creative voices. Nurturing the arts is important because of the difference it makes in society.

#### 11:40 a.m. - 12:40 p.m. | Session C1: Probing Meaningful Human Existence | LRC 255

#### The Wife of Bath's Tale and Prologue: Satire as a Form of Advocacy

Jillian LeMaire, COM I Advisor, Dalel Serda

Geoffrey Chaucer is known for his criticisms of the church and of the British hierarchy that he fell subject to. The most commonly highlighted literary devices he uses to convey his complex messages are irony, imagery, and rhetoric. However, one of the more subtle devices Chaucer uses to support his themes is satire. According to scholars Baumgartner and Lockerbie, satiric devices are typically used to promote action against the status quo that society perpetuates. Chaucer's The Wife of Bath's Prologue and Tale satirizes the way that society stereotyped women at the time. In Chaucer's case, he used the Wife of Bath as a model of all the negative stereotypes that society believed women embodied. For instance, in a time during which purity was expected of a woman, the Wife had taken five husbands. thus she was known for her sexual exploits. Chaucer did this to bring attention to the gross double standards that women faced during this time period.

Due to the controversial nature of Chaucer's work much discourse has been attracted regarding the intent of his works--specifically the Canterbury Tales. For instance, many scholars think that Chaucer uses the Wife of Bath to perpetuate the stereotypes that women faced; however, I argue that Chaucer uses satire in The Wife of Bath's Prologue and Tale to highlight the many injustices that women faced during this time in order to inspire opposition to them. Through my research, I will mine the unknowns of Chaucer's influence as a proto-feminist.

#### **Eudaimonia: Its Modern Relevancy and Adaptation**

Cody Grace, COM | Advisor. Stacey Burleson

The Greek peoples had a philosophical idea referred to as eudaimonia which roughly translates to leading a virtuous or good life. This concept has had countless applications when it comes to mentally surviving different periods of history and it is easy to understand how it could be used as a sort of guide to help "lost" or disenfranchised individuals today. This classical Greek philosophy has been long regarded as a truth amongst truths however as time has passed over the centuries it has become apparent that the concepts presented by the classic Greeks are becoming increasingly difficult to be temporally localized as they have aged terribly. An example of which is the ancient Greeks outlook towards women and how they're deemed to be lesser versions of men. For someone to live ethically today (in the west at least) they typically need to be aware of the social equality that is currently for the most part enjoyed in western nations. This however is not the status quo across the world and an individual is likely to encounter areas of the globe where women still unfortunately have subservient roles in society. To live ethically one would need to not only reject the ancient Greek methods but also need to understand how to ethically spread rights to individuals while still maintaining an understanding of cultural relevancy when handling cultures who value women differently. For this reason, I propose that there be a redefining or reimagining of Eudaimonia in which it can once again be used as both a guideline to live a pleasant and ethical life but also be used as a tool to cope with and fight against the existential issues faced by citizens living in the 21st century.

#### **Kaleidoscope Dreams and the Human Experience**

Mia Brown, COM | Advisor. MJ Emig

Psychedelic trips are known for opening your mind, but can they do more than that? My research focuses on how psychedelic trips can strengthen the human experience and explore the human condition. The human condition is defined as the characteristics, key events, and situations that all humans

experience and that are essential to life. The purpose of my project is to shed light on how we can enhance, shape, and define what the human experience is and what will be. I will analyze the psychedelic trips of others from journals and connect their experiences to how it affected their perspective regarding the human condition and their experiences. In addition, I will dive into the barriers, such as social media and artificial intelligence, that affect our ability in the modern age to form strong human connections which result in deeply personal experiences that are vital to our existence. My conclusions from my research are that psychedelics can help us achieve deep and vivid experiences that are not restrained by technology which can negatively influence our personal journeys. The importance of this research is to toy with the possibilities of the future of the human condition and approach it with a new lens.

#### 11:40 a.m. - 12:40 p.m. | Session C2: Mining the Body's Unknown | LRC 257

#### **Sickle Cell Trait and Athletics**

Aimee Estes, COM I Advisors: James Mubiru

Athletics are a huge part of American society and culture, especially football. High school and college athletes push themselves to the limits to become the best of the best in their sport. Student athletes that have medical conditions may not want to make them known. This can be very dangerous, especially when that medical condition is being a carrier of the sickle cell trait. There is a lot of unfair perceptions when it comes to sickle cell, which can lead to health-related stigma for athletes. Sickle cell disease is the most common inherited blood disorder, to which there is no cure. There is a lack of education about sickle cell disease and without awareness student athletes who carry the sickle cell trait will continue to be at risk for exercise-induced dehydration or exhaustion that can seriously impact their health. To have the disease one must get the gene from both parents. When a person gets the gene from only one parent, that person has sickle cell trait, not the disease. Sickle cell trait was once thought to be a relatively harmless condition that would not impair a person from leading a normal, healthy life. Sickle cell trait in athletes, however, is surrounded by many unknowns which put athletes' lives in danger. These unknowns combined with lack of education on sickle cell traits puts student athletes at risk and there is a need for education among athletes, coaches, and trainers.

#### A Brief Study Behind Electrocardiography

Joseph Ponce de Leon, COM | Independent Scholar

The 12-lead electrocardiogram is the most common, noninvasive, and inexpensive way to diagnose an acute coronary event. The science behind electrocardiography is only as good as the data gathered for interpretation by the expert reading it. Today Emergency Department physicians can have a 12 lead EKG transmitted to them by emergency medical personnel from the field and the EKG is interpreted. It is assumed that the placement of electrodes is in the correct anatomical position. A recent study done by the American Board of Cardiovascular medicine took a medium sized hospital and analyzed lead placement of both 12-lead ECG and continuous cardiac monitoring. The purpose of this study was to analyze accuracy of lead placement and arrhythmia interpretation by healthcare professionals. The standards used to analyze and survey the electrode placement was adopted from the 12lead golden standard and continuous monitoring standards set forth from Dr. Mason and Dr. Likar in the American Heart Journal which was published in 1966 (the standard for placement and interpretation and is unchanged today). This method of analyzation was also tested against the less popular standard of lead placement and interpretation by the EASI lead system which is the only other known method of monitoring patients with cardiac events. The results showed less than 50% accuracy with lead placement. The results further show that remedial training is needed in the area of electrode placement and arrhythmia





interpretation. As our dependence on electronic data progresses, we must never sacrifice convenience for accuracy. Acute myocardial infarction (heart attacks) can be diagnosed in the field and treatment started prior to arriving to the hospital. We must ensure that proper technique is performed so that we can improve care worldwide. If we perform a mediocre test, we will reap a mediocre result.

#### **Chronic Traumatic Encephalopathy (CTE): Mining the Unknowns of the Science** of Head Injuries

Justin Peel, Brazosport College | Advisor. Carrie Pritchett

Chronic Traumatic Encephalopathy (CTE) is a degenerative disease of the brain caused by repetitive head trauma. It is most likely to be found in athletes and military personnel, but anyone who has had a history of head trauma can contract CTE. There are many unknowns about CTE, since this disease cannot be currently diagnosed until the death of a patient. There are, however, certain symptoms and life situations that can be observed to prevent further degradation of possible CTE patients. This study not only addresses the causes, symptoms, scientific unknowns, and age-related cognitive delays that could be caused by CTE, but it offers a case study in the patient who was posthumously diagnosed with worst case of CTE documented. Former professional football player and convicted murderer Aaron Hernandez's life is a study in how CTE can be caused by early childhood trauma, as well as a career in college and NFL football. Hernandez's case, and that of many others, will hopefully lead to a method of diagnosis while the patient is still alive, and to a method of preventing further damage from this traumatic injury and eliminating the unknowns associated with CTE.

#### 11:40 a.m. - 12:40 p.m. | Session C3:

#### Creative Writers' Reading | LRC 213

#### Writing Unknowns: Exploring Mystery and Belief Through Creative Writing

Featured writers include Ashley Tompkins, Elissa Kovacevich, Zion Luerson, Joseph Palm, and Skyler Doucet

Moderator. Brian Anderson

William Faulkner once write, "The past isn't dead; it isn't even past." He understood the special hold the past has on us and how we struggle to understand it in order to live in the present. In this special creativewriting session, students from College of the Mainland's creative-writing class present original works of nonfiction, fiction, and poetry inspired by or connected to the theme of exploring unknowns and delving into the past on the level of individual lived experience. These writers probe at the mysteries of faith and belief at the center of human existence, the questions left by absent family members and friends, and the difficulties of knowing the human heart. Through these readings, the writers affirm the ways that writing can be used as a means for reflection and discovery as they mine memory and emotion in search of the truth as they understand it.

NOTE: This session is non-juried.

## KEYNOTE SPEAKER AND ABSTRACT

#### **Andrzej Stewart Keynote Speaker**

Andrzej Stewart is an experienced spacecraft operator for a wide variety of NASA missions. He's worked

as a spacecraft mission controller for the Spitzer Space Telescope, Juno, GRAIL, and NASA's Mars orbiter fleet. Andrzej now works in Mission Control at the Johnson Space Center, training as a Navigator for the upcoming Artemis missions of the Orion spacecraft. He is also a 1st Lieutenant in the Civil Air Patrol,



serving as an Assistant Aerospace Education Officer and Assistant Public Affairs Officer, and is currently training as a Search and Rescue/Disaster Relief Mission Pilot.

Andrzej earned degrees in Aerospace Engineering from the University of Texas at Austin and the Massachusetts Institute of Technology. He aspires to be a NASA astronaut. In pursuing that, he has served as the Flight Engineer of HERA C2M2, a two-week asteroid mission simulation at the Johnson Space Center, and as Chief Engineering Officer of HI-SEAS IV, a year-long Mars simulation in Hawaii.

#### Abstract

#### "Life in Simulated Space"

Astronauts undertaking missions to deep space destinations like the Moon and Mars will face a number of unknown challenges caused by the vast distances and durations involved in these journeys. To identify, study, and prepare to meet these challenges, NASA is conducting a variety of space analog missions, which recreate aspects of life in space here on Earth. Andrzej Stewart, who has served as a crewmember for simulated space missions in the HERA and HI-SEAS analogs, will talk about what life is like as part of an analog crew, as well as what life may be like for astronauts living on Mars in the future.



#### COM ADMINISTRATION



**Dr. Warren Nichols COM President** 

Warren Nichols began his tenure as president of College of the Mainland in February 2017. He has since been working with the Board of Trustees, faculty and staff to develop processes and strategies to keep the college's focus on student success and providing a qualified workforce.

Prior to COM, he had stints as vice chancellor of community colleges for the Tennessee Board of Regents which supported 13 Tennessee public community colleges, president of Volunteer State Community College in Gallatin, Tennessee, and vice president of academic affairs at Darton College in Albany, Georgia.

A native of Fort Worth, Nichols began his career as a police officer in Arlington, Texas, before transitioning to higher education. Nichols earned a doctorate in higher education administration from the University of Houston. He received his master and bachelor degrees from the University of Texas at Arlington and began his journey in higher education at Tarrant County Junior College in Hurst, Texas.

Already making an impact in the community, the Texas City-La Marque Chamber of Commerce honored Nichols with the Rising Star award in January 2018. The award recognizes an emerging leader whose record reflects ongoing and exceptional growth and contributions to the profession.

#### **Dr. Jerry Fliger Vice President for Instruction**

A first-generation college student, Dr. Jerry Fliger is passionate about the role that education plays in transforming lives. He graduated with a bachelor's degree in Interpersonal & Public Communication from Purdue University on his second attempt at college.

While attending the Fort Wayne, IN campus of Indiana University-Purdue University, Dr. Fliger competed in competitive intercollegiate speech competitions. This led to an opportunity to pursue a Master's in Speech Communication from Miami University. His teaching career began at Miami and continued while he completed his Ph.D. in Communication, with a focus on Rhetoric and Culture, at Bowling Green State University.

Dr. Fliger has served as a faculty, department chair, associate dean and dean prior to coming to College of the Mainland to serve as the Vice President for Instruction. His passion for education drives his desire to see students given the opportunity to chase their goals with supportive and engaged faculty and administrators.



Dr. Vicki Stanfield Vice President for Student Services

Dr. Vicki Stanfield has served in administrative positions in academic and student affairs to improve student success by working with faculty, instructional and student service leaders to create new programs and practices. At COM, Vicki serves as vice president for student services, providing leadership over

admissions and records, recruitment, testing services, financial aid, advising and counseling, TRiO, Title V - HSI grant and student life. She also serves as co-chair of the Student Success Council. Vicki holds an Associate of Art from Lone Star College-North Harris and a Bachelor of Arts in Teaching in English—Summa Cum Laude, Master of Education in counselor education and doctorate in educational leadership from Sam Houston State University.



**Dr. Clen Burton Vice President for Fiscal Affairs** 

Clen Burton is the father of Clay and Shelby, boy and girl twins. He is married to the former Michelle Barkate and is a native of Baton Rouge, Louisiana.

He currently serves as the COM vice president of fiscal affairs and as an adjunct accounting instructor. From

2004 to 2012, he served as the vice chancellor of finance and administration for River Parishes Community College. Previously he worked in health care, public accounting and the construction industry.

He has a doctorate in human resource education, a master's degree in accounting and a bachelor's degree in speech communication from Louisiana State University. Later in life, he earned an associate degree in computer information systems from Bossier Parish Community College. He is a certified public accountant.

A member of the Dickinson Rotary Club, he has an unhealthy passion for LSU football and officiated high school football for seven seasons.



Dr. Steven L. Sewell **Dean of Academic Programs** 

Dr. Steven L. Sewell serves as dean of academic programs at COM, having formerly served as chair of the Social and Behavioral Sciences Department and as a professor of history. Steve served as director of instructional assessment and co-chair of COM's

Institutional Effectiveness Council. Steve earned his Bachelor of Arts, Master of Arts and doctorate in history from Oklahoma State University. He has published extensively on the history of labor in the Oklahoma coal mining industry. He recently published a chapter entitled, "The Spatial Diffusion of Beer from its Sumerian Origins to Today" in The Geography of Beer (2014). Steve taught at Oklahoma Panhandle State University, Medgar Evers College of the City University of New York and Texas Tech University.





Dr. Carla Boone **Dean of Workforce & Continuing** Education

Dr. Carla Boone is the COM dean for workforce and continuing education. Carla is a COM graduate and has worked in a number of positions at COM since 1986. Carla received a Bachelor of Science in health care administration from University of Texas Medical Branch

Galveston, an Master of Science in instructional technology from University of Houston Clear Lake and a doctorate in community college administration from Texas Tech University.



#### Dr. Kris Kimbark **Dean of Students**

Dr. Kris Kimbark has over 15 years in higher education administration as well as over 15 years as a health care administrator in brain injury rehabilitation. She has served COM in many capacities, including director of student support services, associate vice president of student services and most recently as dean of students. She has

a doctorate in educational leadership with an emphasis in higher education. She has been published in the Community College Research Center journal on the topic of student success in community colleges. Dr. Kimbark also was honored by PTK in 2015 with the Hallmark Award. She is passionate about helping students succeed in their educational endeavors, especially disadvantaged students.

She acquired a Bachelor of Arts degree from Southeastern Oklahoma State University and her master's degree at the University of Michigan followed by her doctorate in education at the University of Houston-Clear Lake.



# THANK YOUS:

Thank you, College of the Mainland's student hosts, for helping run the technical and logistical aspects of this event. Thank you to PTK Sigma Delta officers, Noah Lindsey and Wyatt Maxwell. Thank you, COM students, George Gonzales, Cole Robinson, Nick Foley, Lydia Torres, Vadim Bronnikov, Aaron Garcia, Yale Diaz, and Annabelle Becker.

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Lastly, thank you, Board of Trustees, for being valuable advocates for College of the Mainland. Events such as these would not be possible without your support.

Sincerely,

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



