

# 2026 GCIC ACADEMIC SYMPOSIUM

OPEN TO HIGH SCHOOL  
DUAL CREDIT, UNIVERSITY  
AND COMMUNITY COLLEGE  
STUDENTS!

## EMBODIED KNOWLEDGE: *Decoding & Recoding the Self*



[com.edu/symposium](http://com.edu/symposium)

FRIDAY, APRIL 10, 2026

9 A.M. - 2:30 P.M.

ICB AND LRC 131

1200 N. AMBURN ROAD  
TEXAS CITY, TEXAS 77591

COM | College of the Mainland

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

# WELCOME

## to College of the Mainland's twelfth Gulf Coast Intercollegiate Consortium Academic Symposium 2026!

Our theme this year is “Embodied Knowledge: Decoding and Recoding the Self.”

Humans like to know. Whether we want to honor knowledge or own it, we desire to recognize, believe, understand, name, domesticate and dominate.

Often, we must know, to be “in the know.” We feel secure in knowing. We can do things with knowledge and very little in its absence — unless, of course, we count the bliss that can come with ignorance as worth our time. Ah. There's the rub. There is the conundrum ... Do we really enjoy knowing? Is that what we seek? Do we trade almost anything for knowledge, or is it really the exact opposite? Are we happier in the space where knowledge is absent and where what remains is (simple ... easy!) gratification and pleasure? Does the body seek knowledge and truth or the easy caresses of corporal, psychological and emotional seduction? Does the body know when the mind fails? Does the body carry with it genetic and generational knowledge in code that falls outside human linguistic systems?

Yet here we all are — tangled by choice, need or will in higher education where we see it as our quest to know, to be the knowers on whom others and the world rely. The question of how we know or why we know is at the center of our human motivation and inspiration, we claim. To think is to know! To embody is to know! To experience is to know! To believe is to know! To see, hear, taste, feel, smell is to know! All of it, some of it and none of it is valid — we claim at one time or another.

Who gets to claim the validity of truth and the truth of knowledge? Why do they get to? How can we challenge hegemonic domination when it dictates what knowledge and truth are? How can we share in truth making, in knowing and in being?

To live in knowledge means to throw out nothing, to hesitate before privileging one way of knowing above another, to have a tenuous relationship with “absolute truth,” to walk toward the middle ways, to invite difference into our walk toward knowing because it's in difference where nuance, depth, complexity and beauty astonish.

This year's theme, “Embodied Knowledge: Decoding and Recoding the Self,” asks us to consider the body as archive. To consider what the body helps us know when other elements are of no or little assistance. We ask too what the body tells us that complements other knowledges and ways of being.

Consequently, we want to ask you to consider what it might mean to “decode” and “recode” the self. How do we do this? How do education, analysis, examination, experimentation, experience and research help define decoding and recoding?

We ask too that we reconsider not only what we mean by “knowledge” but what we mean by “embodiment” and the body. What makes a body? Who makes a body? What does it mean to be a part of a body politic? How do we expand the borders of a body without sacrificing integrity but rather by incorporating abundance?

Here are a few questions that can help extend your thinking but feel free to develop your own: What can the hard sciences, human and behavioral sciences, the humanities, the fine arts and workforce tell us about the body, a body, embodiment, knowledge and coding?

What are the benefits and challenges of embodied knowledge? What are the benefits and challenges of naming a knowledge, embodying a knowledge and/or de/recoding it?

The 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 select 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 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 Gwendolynn Barbee-Yow  
GCIC Academic Symposium Co-Chairs

## PROGRAM OVERVIEW

**8:30 – 9:15 a.m.**      **Registration, Coffee, and Breakfast Bites** ..... ICB Lobby

**9:20 – 9:30 a.m.**      **Welcome Remarks in all session rooms: Please report to session rooms by 9:20 am.**

President Helen Castellanos Brewer's Remarks

Professors Dalel Serda and Gwendolynn Barbee-Yow, GCIC Academic Symposium Co-Chairs

### **A SESSIONS: 9:30 to 10:30 a.m.**

**9:20 – 10:30 a.m.**      **Session A1: Bacterial and Neurological Ecosystems** ..... ICB 201

#### **Presence of Bacteria on Cellphones in College Environment**

Mariana Hernandez Lima, Alexa Mosquera, Martin Perez, Galveston College | Advisor: Alex Peniche

#### **An In Vitro Evaluation of the Antimicrobial Activity of Black Seed Oil Against Selected Bacterial Strains**

Kacie Boer, College of the Mainland | Advisor: James Mubiru

#### **Beyond the Brain: The Role of the Body in Learning and Memory**

Erick Gutierrez, Houston City College | Advisor: Toni Holland

#### **Evaluating the Antimicrobial Effectiveness of OdoBan Against Select Bacterial Species**

Christian Cravens, College of the Mainland | Advisor: James Mubiru

**9:20 – 10:30 a.m.**      **Session A2: Art and Self**..... ICB 203

#### **The Effect of Music in Navigating Oneself**

Daniel Adedeji, Houston City College Central | Advisor: Nicolas Rangel

#### **What Happens When Life Continues Without You**

Jonathan Sagastizado, College of the Mainland | Advisor: Kristy Peet

#### **Music and its Properties in Healthcare**

Phoenix Martinez, Houston City College – Central | Advisor: Nicolas Rangel

#### **Decoding Little Ashley: A Neuro-Aesthetic Interrogation of the Embodied Self**

Ashley Sheldon, College of the Mainland and University of Houston-Clear Lake | Advisor: Mark Greenwalt

**9:20 – 10:30 a.m.**      **Session A3: Transformative Bodies**..... ICB 204

#### **Assessment of Facial Sunscreen Application in Lifeguards Using UV Photography**

Maria Montoya Vargas, College of the Mainland | Advisor: Alex Peniche

#### **The Body as Archive: A Psychological Exploration of Behavioral and Sociocultural Influences**

Jazzmine Gutierrez, Julissa Reyes, and Ashley Ruiz, Houston City College – Eastside | Advisor: Toni Holland

#### **Bridging Biology and Behavior: Epigenetic Pathways of Change**

Julio Piñeda, Houston City College | Advisor: Toni Holland

#### **Cloudy, Green, and Unbothered: My Bacteria's Response to Black Seed Oil**

Britney Vanderzyden, College of the Mainland | Advisor: James Mubiru

**9:20 – 10:30 a.m.**      **Session A4: Embodied History/Embodied Politics** ..... ICB 206

#### **Explaining the Shift: The Democratic Party and the Hispanic Vote**

Leonidas Contreras, College of the Mainland | Advisor: Shinya Wakao

#### **Voting Apathy: The Key to Voter Mobilization**

Kaneeze Batool, Houston City College – Northwest | Advisor: Simone Gardiner

#### **The Enduring Legacy of Jim Crow**

Daju Helaire, San Jacinto College | Advisor: Nicholas Coulombe

#### **Avoiding Bias in the Interpretation of History**

Vivian Montelongo and Tyre'Onna Woods | Advisor: Nicolas Rangel

**9:20 – 10:30 a.m.**      **Session A5: Financing the Self** ..... ICB 221

#### **Knowing the Price of Care: Financial Structures, Lived Bodies and Ethical Authority in American Healthcare**

Cora Thomas, College of the Mainland | Advisor: Siromi Wijesinghe

#### **The Growing Importance of Financial Literacy Among College Students**

Syed Ahmad, Houston City College Northwest Spring Branch | Advisor: Simone Gardiner

#### **Navigating Rising Costs of Tuition and Building Wealth to Create Financial Independence**

Geovanny Yanez, College of the Mainland | Advisor: Siromi Wijesinghe

#### **Federal Reserve and the Economy**

Janis Richards, San Jacinto | Advisor: Cody Pogue

**9:20 – 10:30 a.m. Session A6: Caring for the Self in Social Media..... ICB 227**

**Prayers vs. Posts: Religious Coping and Mental Health Outcomes in the Age of Social Media**

Abigail Plew, College of the Mainland | Advisor: Anthony Cavazos

**Social Media Addiction from Biological Standpoint**

Vladyslava Tyshko, Houston City College – Northwest | Advisor: Simone Gardiner

**Decoding the Knowledge of Social Media Exploitation: Protecting Minors in the World of Social Influencers**

Kimberly Piña, Brazosport College | Advisor: Carrie Pritchett

**The Price of Innovation**

Dannie Bannister-Yarde, College of the Mainland | Advisor: Monique Suarez

**9:20 – 10:30 a.m. Session A7: The “I” in Im/migration ..... ICB 228**

**Embodied Knowledge: How Migration and Work Reshaped My Sense of Self**

Linh Phung Quan, Houston City College Eastside | Advisor: Toni Holland

**Decoding the Accent: Language, Identity and the Embodied Archive**

Vivian Varela, Houston City College | Advisor: Nicolas Rangel

**Struggles of Mexican Immigrants**

Melanie Delgado, Houston City College | Advisor: Toni Holland

**Not from Here, Not from There: Rethinking Immigration Through Symbolic Interactionism**

Debanny Cruz, College of the Mainland | Advisor: Will Bryerton

**9:20 – 10:30 a.m. Session A8: Health, Happiness, y El Cuerpo ..... ICB 318**

**The Science of Eating: How Hidden Sugars Steal Student Focus and Practical Recipes to Reclaim Your Energy**

Theint Theint Thu, Houston City College – Central | Advisor: Nicolas Rangel

**Keeping your Mind and Body Happy**

Jolie Van Houten, College of the Mainland | Advisor: James Mubiru

**Mastery in Motion: Self-Efficacy, Exercise and Academic Persistence in Community College Students**

Christopher David Perez, Houston City College | Advisor: Nicolas Rangel

**Black Seed Oil - The Hidden Gem**

Hanh Nguyen, College of the Mainland | Advisor: James Mubiru

**9:20 – 10:30 a.m. Session A9: COM's Literary Journal: *The Badelynge Review* | NONJURIED SESSION ..... ICB 319**

Advisor/Moderator: Gwendolynn Barbee-Yow

Students Featured: Mya Moore, Darian Russell, Coralyn Shirley, and Ysaac Stowe

**B SESSIONS: 10:40 to 11:40 a.m.**

**10:40 – 11:40 a.m. Session B1: The Science of Stress ..... ICB 201**

**When Stress Becomes Cellular: Telomeres and the Biology of Adversity**

Favour Sydney-Akaninwor and Na Li, Houston City College – Northwest Spring | Advisor: Simone Gardiner

**Cardiovascular Responses to Academic Stress: Heart Rate Variability in Students**

Jennifer Perez, Galveston College | Advisor: Alex Peniche

**Embodied Knowledge Through Performance Anxiety in Colorguard**

Rafaela Pimentel, Houston City College – Central | Advisor: Nicolas Rangel

**Decoding the Stress Response: Embodied Knowledge and Resilience in Nursing Education**

Sydney Carvajal and Adrienne Courteau, College of the Mainland | Advisor: Rachel Fano

**10:40 – 11:40 a.m. Session B2: Human Creativity ..... ICB 203**

**The King Who Could Not Escape Fate: The Story of *Oedipus Rex*, Translated to Reach a More Inclusive Audience**

Angelica Black, College of the Mainland | Advisor: Stacey Burleson

**Chained**

Noel Lewis, San Jacinto College-South | Advisor: Judith Maime Skeele

**“H@yw1r3”: Man Lost to Time and Technology; An Original Work**

Audrey Jian Iletto, College of the Mainland and Clear Falls High School | Advisor: Sean Curcio

**Hybrid Identity Exhibition Project**

Alissa Reyna, College of the Mainland | Advisor: Mark Greenwalt

**10:40 – 11:40 a.m. Session B3: Technological Falsehoods and Humanity ..... ICB 204**

**Decoding Political Falsehoods in Social Media: Russia's Internet Research Agency and the Architecture of Disinformation in the United States**

Sabir Fisher, Brazosport College | Advisor: Carrie Pritchett

**The Philosophy of Man and Technology**

Adriel Giwa-Amu, Houston City College – Northwest | Advisor: Simone Gardiner

**We, the Programmed: Corporate Control over Society in Dystopian Sci-Fi Films & Anime**

Aiden Mena, Lone Star College – Kingwood | Advisor: Mari L. Nicholson-Preuss

**The Impacts of Deepfake Technology in Media & Politics**

Mineva Moutcheu Deuffi and Tyler Sumpter, Houston City College – Spring Branch | Advisor: Simone Gardiner

10:40 – 11:40 a.m.

**Session B4: Decoding Crime and Violence..... ICB 206**

**Neuroscience in Forensic Investigations**

Alexia Castillo, College of the Mainland | Advisor: James Mubiru

**The Role of Culture in Peer-Initiated Sexual Abuse Perpetration Among Adolescents: A Cross-Cultural Analysis**

Favour Ogbonna, Lone Star College – CyFair | Advisor: Aurora Lugo

**The First Detective: How Edgar Allan Poe Trained America to Solve Crimes**

Lylah Martinez, Lonestar Kingwood College | Advisor: Mari Nicholson-Preuss

**State-Sanctioned Violence: The Texas Rangers and the Lynching of Chicanos**

Alazae Martinez, College of the Mainland | Advisor: Dalel Serda

10:40 – 11:40 a.m.

**Session B5: Nature +/- Nurture ..... ICB 221**

**The Body as Archive: Biological Coding, Embodied Knowledge and the Intelligence of Living Systems**

Sedonia Lanette Clark Robinson, Houston City College | Advisor: Teresa Washburn

**Nature, Nurture and the Making of Extreme Behavior**

Alinna Garza, Houston City College – Eastside | Advisor: Toni Holland

**The Power of Mindset: Is Your Glass Half Full? Or Half Empty?**

Alyssa Garcia, College of the Mainland | Advisor: Dalel Serda

**The Perceived Impact of Personality on the Academic Careers of Gifted Students**

Deepika Miryala, Clear Falls High School | Advisor: Alexis Allen

10:40 – 11:40 a.m.

**Session B6: Session B6: Decoding and Recoding an "Education" ..... ICB 227**

**Beyond the Lecture: A Student's Journey Where Experience Meets Education**

Hannah Lemmonds, College of the Mainland | Advisor: James Mubiru

**Learning Through Movement in XR**

Juan Alvarado, Houston City College – Spring Branch Northwest | Advisor: Simone Gardiner

**College: The Great Equalizer?**

Amanda Cartwright, College of the Mainland | Advisor: Dalel Serda

**The Ancient Roots of Modern American Education**

Alexa Kiefer-Rodriguez, College of the Mainland | Advisor: Stacey Burleson

10:40 – 11:40 a.m.

**Session B7: Embodying Trauma..... ICB 228**

**The Truth in the Trauma**

Coralyn Shirey, College of the Mainland | Independent Scholar

**How the Trail of Tears Embodied the Difference of Change**

Rachel Currie, Lee College | Advisor: Brianne Dayley

**The Weight of the Past: Factors Impacting the Disclosure of Trauma**

Marly Rundell, College of the Mainland | Advisor: Dalel Serda

**Embodied Difference and The Limits of Inclusion in *Hidden Figures***

Naomi Rivera, Lee College | Advisor: Brianne Dayley

10:40 – 11:40 a.m.

**Session B8: Bodies in (Artful) Action ..... ICB 318**

**The Body as Archive: Rhythm, Memory, and Resistance in Colombian Traditional Music**

Maria Montoya Vargas, College of the Mainland | Advisor: Loanny Hernandez

**The Sport, Long Forgotten, Helping America**

Memphis Riehl, College of the Mainland | Advisor: Bernie Smiley

**Embodied Vision: Photography and Graffiti as Practices of Knowing**

Jesse Gomez, Houston City College – Eastside | Advisor: Toni Holland

**Inside the Texas Marine Mammal Stranding Network: A Student Perspective**

Brynna Malley, Galveston College | Independent Scholar

10:40 – 11:40 a.m.

**Session B9: COM's Creative Writing Club | NONJURIED SESSION ..... ICB 319**

Advisor/Moderator: Courtney Pugh and Lisa Frase

Students Featured: Brianna King, Vincent Ybarra, Mykenzie Gorom, Aaron Cobb, Christian Sinicrope,

10:40 – 11:40 a.m.

**Session B10: University of Houston – Clear Lake's GRADUATE student research showcase | NONJURIED SESSION ..... ICB 304**

Advisor/Moderator: Giazú Enciso Domínguez, Assistant Professor Psychology Department

Students Featured: Precis 'Damian' Clarke, Katherine Smith and Jacey Keys

**C SESSIONS: 11:50 a.m. to 12:50 p.m.**

**11:50 a.m. – 12:50 p.m. Session C1: Embodied Knowledge ..... ICB 201**

**Nosocomial Infections as Embodied Knowledge**

Martin Arguello, Clinton Orisakwe, Ava Hardin, College of the Mainland | Advisor: Rachel Fano

**Neurobiological Consequences of Sustained Stress**

Kayla Chitic, Houston City College – Central | Advisor: Nicolas Rangel

**Consequences of Genetic Modification of Human Embryos**

Katelyn Clark, College of Mainland | Advisor: Gwendolynn Barbee-Yow

**Archive, All of Us and AI in Alzheimer's Disease**

Kevin Molina and Jiya Desai, University of Houston – Downtown | Advisor: Xyanthine Parillon

**11:50 a.m. – 12:50 p.m. Session C2: Humanity's Hands on the Environment ..... ICB 203**

**The Anatomy of Life: Experiences**

Kendra Salmeron, Houston City College – Eastside | Advisor: Toni Holland

**Cars, Zoning, Community: The Failure of U.S. Car Dependency**

Jimmy R. Davis IV, Lee College | Advisor: Brianne Dayley

**Evaluating the Role of 3D Printing in Modern Construction**

Tina Diep, Houston City College – Northwest | Advisor: Simone Gardiner

**An NLP Framework for Measuring Divergence Between ESG Disclosures and Performance**

Phu Vo, MunifKhan Khokhar, Chhengly Kaing, Houston City College – Northwest | Advisor: Simone Gardiner

**11:50 a.m. – 12:50 p.m. Session C3: Encoding Oppressive Cultural Norms ..... ICB 204**

**Culture and Identity in Workplace**

Emmanuel Aragon and Ahmed Alnouseiri, Houston City College – Central | Advisor: Nicholas Rangel

**"They're Not Giving You a Hard Time, They're Having a Hard Time," Compassion with Autistic Youth**

Kylie Ramirez, University of Houston – Downtown | Advisor: Dean Kostantaras

**Knowledge is Power?**

Saifullah Saqib, Houston City College – Eastside | Advisor: Toni Holland

**From Silence to Sovereignty: Intersectionality and Resistance in *Mrs. Chatterjee vs. Norway***

Shakuntala Bhowmick, Lee College | Advisor: Brianne Dayley

**11:50 a.m. – 12:50 p.m. Session C4: Cultural/Textual Analysis ..... ICB 206**

**The Taste of Transformation**

Emily Suarez, Houston City College | Advisor: Toni Holland

**Quiet Queerness**

Jadyn Bell, Lee College | Advisor: Georgeann Ward, Javier Ramirez, and Brianne Dayley

**LUX: Rosalía's Cultural and Industrial Impact on the New Musical Era**

Beatriz Isabella Martin Hernandez, Houston City College – Central | Advisor: Nicolas Rangel

**Representations of Disability in Franz Kafka's *The Metamorphosis* and Osama Dazai's *No Longer Human*:**

**The Role of Literature in Creating Empathy**

Alex Mendoza, University of Houston – Downtown | Advisor: Dean Kostantaras

**11:50 a.m. – 12:50 p.m. Session C5: History + Today ..... ICB 221**

**The British Victorian Era: Food Recreation**

Angelica Black, College of the Mainland | Advisor: Courtney Pugh

**The Minds Behind the Civil War of Skyrim**

John Kain, College of the Mainland | Advisor: Stacey Burleson

**Who Gets to Rewrite You?**

Steven Salas and Gabby Maya, College of the Mainland and Dickinson High School | Advisor: Independent Scholars

**Socialist Cosmonauts and Robots: The Influence of Communism in Soviet Children's Science Fiction Books**

Olivia Brooks, Lone Star College – CyFair | Advisor: Aurora Lugo

**11:50 a.m. – 12:50 p.m. Session C6: Exploring Identity ..... ICB 227**

**Spectrum of Identity**

Juan Martinez, Houston City College – Eastside | Advisor: Toni Holland

**Exploring the Impact of Colorism: Does it Affect Your Life?**

Brianna Mungin and Aurihana Mendoza | Advisor: Dalel Serda

**The Impact of Discourse on our Identity**

Isabella Perez, Houston City College – Eastside | Advisor: Toni Holland

**Women's Perceptions of Masculinity: Towards a Potential Transformation of Men**

Isabel Gonzales, University of Houston – Clear Lake | Advisor: Giazú Enciso Domínguez

**11:50 a.m. – 12:50 p.m. Session C7: Embodying Adolescence (+ Beyond) ..... ICB 228**

**The Development of Book Genres Across Childhood, Adolescence, and Into Adulthood**

Brianna King, College of the Mainland | Advisor: Lisa Frase

**Liberating the Internal World of Adolescents**

Mya Moore, College of the Mainland | Advisor: Independent Scholar

**DARE to Change: Decoding America's Largest Failed Harm Reduction Program and Recoding it for the Next Generation**

Carson Cook, College of the Mainland | Advisor: Dalel Serda

**Greed, Fame, Power: Behind the Scenes of Parental Exploitation**

Jessica Landaverde, Lone Star College – Kingwood | Advisor: Eric Skiles

**11:50 a.m. – 12:50 p.m. Session C8: Decoding and Recoding Subjectivities ..... ICB 318**

**From Hope to Healing: Strategies to Navigate Grief**

Debbra Ricket, College of the Mainland | Advisor: James Mubiru

**Senses**

Karla Ortiz, Houston City College | Advisor: Toni Holland

**Adult Education: In a Second Language**

Yeny Contreras Baires, College of the Mainland | Advisor: Roger Mora

**From Ruins to Reform: The 2001 Earthquake and the Religious Roots of El Salvador's Transformation**

Alvin Andrade, Lone Star College – Kingwood | Advisor: Mari Nicholson

**11:50 a.m. – 12:50 p.m. Session C9: Recoding the Engineer's Journey: Decoding Nontraditional Foundations and Developing Professional Identity Through VBA Programming | NONJURIED ..... ICB 319**

Advisor and Moderator: Ernest Carl McIntyre

Student Panelists: Maya Avila-Robbins, Carl Habashi, Kevin De Leon, Luz Renovato

**12:30 p.m. Complimentary Lunch ..... LRC 131**

**1:10 – 1:45 p.m. Keynote Talk and Q & A: Dr. Christina C. Cedillo ..... LRC 131**

Professor of Writing and Rhetoric at the University of Houston – Clear Lake

Title: Composing One's "Self": Decoding and Recoding as Rhetorical Relationship

**1:45 – 2:05 p.m. Audience and Dr. Cedillo's Q & A ..... LRC 131**

**2:10 – 2:30 p.m. Awards, Photos and Wrap-Up ..... LRC 131**

# STUDENT PRESENTATION ABSTRACTS

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

NOTE: These abstracts have been lightly edited to preserve students' intellectual property and authenticity. When necessary, abstracts were shortened.  
9:20 – 9:30 am | Welcome Remarks in all session rooms: Please report to session rooms by 9:20 am.

## 9:20 – 10:30 a.m. | Session A1 ICB 201: Bacterial and Neurological Ecosystems

### Presence of Bacteria on Cellphones in College Environment

Mariana Hernandez Lima, Alexa Mosquera, Martin Perez, Galveston College |  
Advisor: Alex Peniche

Smartphones and other personal mobile devices can act as fomites for community associated bacterial infections like *Staphylococcus aureus* *Escherichia coli* in nonhealth care environments like college campuses. We investigated and looked for bacteria DNA on cellphones of college students. Cell phones are high-touch devices by hands, face, and objects, as well used in different environments (i.e., restrooms), and interestingly rarely disinfected. Thirty cellphone samples were collected from college participants using sterile swabs across all device surfaces. Participants also completed a brief survey capturing cellphone usage habits, hygiene practices, and cleaning frequency. The *16s* gene was used to determine the presence of bacteria in general, *htrA* and *StapB* genes were used to identify *S. aureus*, while *gda* was used to determine presence of *E. coli*. PCR products were analyzed by agarose gel electrophoresis and visualized under UV light to be able to see positive or negative results. Our results showed that all samples were negative for *S. aureus* and *E. coli*, while XX samples were positive for *16s*, indicating the presence of bacteria. Indicating that cellphones are not entirely free of bacteria. Further testing is required to identify which bacteria is more commonly presence in cellphones of students at college.

### An In Vitro Evaluation of the Antimicrobial Activity of Black Seed Oil Against Selected Bacterial Strains

Kacie Boer, College of the Mainland | Advisor: James Mubiru

Black seed oil has been used in traditional medicine for centuries due to its proposed antimicrobial and natural healing properties; however, limited scientific research has examined its effectiveness against specific bacterial species. This study aimed to evaluate the antimicrobial activity of black seed oil against *Staphylococcus epidermidis*, a bacterium commonly associated with skin infections. An in vitro experimental approach was used in which *S. epidermidis* cultures were grown on clear culture plates and exposed to black seed oil under controlled conditions. Bacterial growth was observed and compared to control samples to assess inhibitory effects. Preliminary results indicate that black seed oil demonstrates no significant inhibition of bacterial growth under the conditions tested. These results suggest that black seed oil may exhibit limited antimicrobial activity against *S. epidermidis* when applied using the current methodology. This study is important not only for professional development, but it emphasizes the importance of scientifically evaluating traditional remedies through controlled laboratory experiments. Ongoing research will explore alternative concentrations, application techniques, and experimental conditions to further assess the potential antimicrobial properties of black seed oil.

## Beyond the Brain: The Role of the Body in Learning and Memory

Erick Gutierrez, Houston City College | Advisor: Toni Holland

In this project, I will be exploring how both the brain and the body are vital parts in how we gather knowledge, and how they work together. According to neuroscience, there are different factors that impact the learning process in the brain. For instance, the learning and memory process that we undergo are related to experiences, brain-body connections, and emotions. In this project, I will consider how learning and memory processes impacted, such as experiencing stress, gaining body memory, the process of emotions, and other learning experiences. Typically, the body learns and adapts to situations without the help of the brain, even when one themselves is not aware of what they are learning. By understanding that the body is an integral part in the learning curve rather than as a totally separate system, it can help us explain how experience shapes the brain and allows for a more complete view of how humans know and adapt.

## Evaluating the Antimicrobial Effectiveness of OdoBan Against Select Bacterial Species

Christian Cravens, College of the Mainland | Advisor: James Mubiru

This study evaluates the antimicrobial efficiency of the disinfectant OdoBan through controlled scientific experimentation. The project argues that while OdoBan is effective against certain vegetative bacterial species, it is not universally effective against all forms of bacteria, particularly endospore-forming organisms. Experimental testing demonstrated that OdoBan successfully inhibited the growth of *Escherichia coli* and *Staphylococcus epidermidis*, both of which are common non-spore-forming bacteria associated with household contamination. However, the disinfectant showed no significant effectiveness against *Bacillus cereus*, a known endospore-forming bacterium capable of surviving harsh environmental conditions due to its protective spore structure. This evidence supports the argument that disinfectant efficacy varies depending on bacterial structure and resistance mechanisms. The findings link to the broader theme of microbiological control methods and the importance of selecting disinfectants based on microbial characteristics. While OdoBan is appropriate for general household sanitation, the results indicate it should not be relied upon in clinical or laboratory environments where spore-forming pathogens may be present.

## 9:20 – 10:30 a.m. | Session A2 ICB 203: Art and Self

### The Effect of Music in Navigating Oneself

Daniel Adedeji, Houston City College Central | Advisor: Nicolas Rangel

The poetic symbolism of words and sentences coupled with rhythm and flow create a stimulant that gives the mind a place to wander. When we join this feeling with our own self identities we relate to the meanings of songs and audio projects. As I take apart multiple

works of music, I will display the potential effect each person's preferred musical stimulant (preferred genre and reason). From the effects these have on individuals to the interpersonal relationships gotten from each. This project resonates with me as I strive to find the meaning of music of love within myself. An emphasis of this project will be on music from the early 2000s till date and how it showed a cultural shift in the personality of Americans starting from the single unit of a person. The cultural changes music brings about are insurmountable, from the way it suggests fashion, fame and language; all these are topics for discussion at this year's GCIC Academic Symposium.

### **What Happens When Life Continues Without You**

Jonathan Sagastizado, College of the Mainland | Advisor: Kristy Peet

Many people move through their lives with a quiet but persistent sense that something is off, not because of failure, sadness, or lack of effort, but because life continues while meaning feels postponed. Days repeat, responsibilities are met, progress appears intact, yet a subtle disconnection emerges: the self feels divided from the life being lived.

This project emerges from lived experience within that division. It examines what happens to meaning when attention, identity and action drift out of coherence over time. Rather than treating meaning as something lost or broken, the work reframes it as displaced: relocated into the future, external expectations, or imagined arrivals. Life continues to move forward, accumulate consequences and sustain routine, even as experience thins and presence recedes. Through a descriptive framework, the project articulates how repetition, deferred fulfillment and inherited structures gradually fracture participation without causing collapse. The body remains active, the schedule remains functional, but life is no longer fully inhabited. By naming these dynamics without prescription or moral instruction, the framework invites recognition rather than correction, allowing individuals to see their own patterns reflected without being told who to become. The work ultimately returns to a simple but unsettling proposition: meaning is not something added to life or earned through achievement. It becomes visible when life is allowed to be lived as itself, without division, substitution, or postponement. The consequence is not resolution, but a renewed capacity to inhabit one's own experience as it unfolds.

### **Music and its Properties in Healthcare**

Phoenix Martinez, Houston City College – Central | Advisor: Nicolas Rangel

Music has been used in healthcare for a long time, but its role in physical therapy is unknown to the public. This research looks at whether music meaningfully contributes to patient recovery in physical therapy or has minimal impact. Specifically, it asks whether music improves outcomes and, if so, how does it help physical and neurological processes. Evidence from public health, neuroscience and rehabilitation suggests music may affect motor coordination, pain perception, motivation and emotional regulation. While some studies report more patient engagement and enhanced functional outcomes. Others question whether these benefits go past standard therapy. This project looks at peer-reviewed studies, clinical trials and systematic reviews to clarify music's therapeutic value in physical rehabilitation.

The methodology used is all secondary research and comparative analysis of results related to motor recovery, adherence, pain management and the mental well-being of patients. By identifying patterns across multiple studies, the project evaluates whether music provides unique benefits beyond those of normal rehabilitation. We expect that music has a positive influence, particularly when personalized to patient preferences and goals. Music may enhance motivation, coordination and neurological engagement, making music a supportive tool for rehabilitation. By presenting current research in a more understandable way, this project aims to inform the public about music's potential role in physical therapy and encourage evidence-based integration into practice.

### **Decoding Little Ashley: A Neuro-Aesthetic Interrogation of the Embodied Self**

Ashley Sheldon, College of the Mainland and University of Houston-Clear Lake | Advisor: Mark Greenwalt

Through formative discomfort in questioning and transcending limitations, my focus in higher education has centered on decoding and recoding the self following an adult ADHD diagnosis. Returning to academia after a twenty-year hiatus, I am not merely pursuing a degree but navigating the "hidden currents" of neurodivergence—an embodied reconciliation of past academic experiences with new cognitive frameworks. How does one embody knowledge, and can this be achieved by viewing neurodivergence through an abstract lens? By synthesizing insights from neuroscience, psychology, epistemology, and studio art, I argue that embodied neurodivergent knowledge challenges deficit-based models of learning. As a mixed media artist, I contend that knowledge is not exclusively cognitive but embodied through material engagement and interrogation. Through a visual analysis of my artwork, I demonstrate how formal qualities—texture, color, shape, edge, line, and value—serve as essential metaphors for the nuance and integrity required to embody neurodivergent truth. For the neurodivergent subject, decoding the body is not an act of correction, but of translation. Following years of misdiagnosis, I utilized my creative practice to perform an experiment on my own psyche, personifying the manifestations of ADHD. This required "reparenting" the self—addressing the needs of 'little Ashley' to cultivate a practice of showing up unequivocally. By shedding intrusive thoughts through expressive, iterative layers, I transitioned from survival to autonomy and reclaimed my voice. Ultimately, this work demonstrates that the truth of self is found not in static answers, but in the relentless interrogation an image insists we confront.

## **9:20 – 10:30 a.m. | Session A3 ICB 204: Transformative Bodies**

### **Assessment of Facial Sunscreen Application in Lifeguards Using UV Photography**

Maria Montoya Vargas, College of the Mainland | Advisor: Alex Peniche  
Lifeguards experience prolonged sun exposure, placing them at high risk for ultraviolet (UV) damage and skin cancer. Although sunscreen use is widely recommended, real-world application is often inconsistent and insufficient for full protection. Despite their high occupational risk, sunscreen practices among lifeguards remain understudied. The purpose of this study was

to evaluate facial sunscreen application in lifeguards using ultraviolet (UV) photography to identify commonly missed areas and provide visual feedback. Twenty-five lifeguards from the Galveston Beach Patrol in Galveston, TX, participated. Each completed a questionnaire on sunscreen habits and applied sunscreen as they normally would before duty. UV imaging was then used to assess facial coverage and highlight missed regions. Participants received immediate visual feedback, allowing them to recognize deficiencies and improve application techniques. The findings support the use of UV photography as an effective educational tool to improve sunscreen application among outdoor professionals. Real-time visual feedback increases awareness of inadequate coverage and may enhance long-term sun safety behaviors, contributing to improved skin cancer prevention in high-risk occupational groups.

### **The Body as Archive: A Psychological Exploration of Behavioral and Sociocultural Influences**

Jazzmine Gutierrez, Julissa Reyes, and Ashley Ruiz, Houston City College – Eastside | Advisor: Toni Holland

Psychology is commonly known as the scientific study of the mind and behavior, as it explores a variety of mental processes such as thoughts and emotions that influence how individuals act within their environment. This broader understanding of psychology extends beyond the individual to include the ways social contexts influence behavior, perception and identity. For instance, sociocultural psychology focuses on the influence that social and cultural factors have on cognitive processes and behaviors. This year's theme, "Embodied Knowledge: Decoding and Recoding the Self," suggests that physiology challenges the assumption that knowledge originates solely from higher education. Instead, it emphasizes that knowledge is embodied through social, emotional and experiential processes. This is evident in everyday experiences, from how individuals perceive the world to how they apply learned behaviors when communicating with others. By recognizing the body as a site in which social experiences are stored and expressed, psychology contributes to understanding the body as an archive of social knowledge.

### **Bridging Biology and Behavior: Epigenetic Pathways of Change**

Julio Piñeda, Houston City College | Advisor: Toni Holland

What makes up a body? Some individuals may say that cells make up the body. Others may proclaim that the actions and environment make up the body. I believe the intersectionality of both concepts are what make up the body. This research will try to tackle that question within the scope of biology by exploring the science of epigenetics. Epigenetics is the study of how positive or negative behaviors and environmental factors affect our body's genes. This research will explore how we can use what we know about epigenetics to help our body heal from certain conditions with the correct behavior and how we can produce positive genetic changes to live a healthier life. Additionally, I want to explore and educate on the different effects that socioeconomic factors have on the genetics of low-income individuals and how we can make changes in society to remove/decrease any and if possible, all negative side effects.

### **Cloudy, Green, and Unbothered: My Bacteria's Response to Black Seed Oil**

Britney Vanderzyden, College of the Mainland | Advisor: James Mubiru

This project looks at how black seed oil (BSO) behaves when it comes face to face with bacteria that are not exactly known for good manners. I tested three species: *Escherichia coli* (EC), *Bacillus cereus* (BC) and *Pseudomonas aeruginosa* (PA). To keep things consistent, I prepared a 1:1 "BSO Work Solution" and loaded it onto a 96 well plate like a tiny bacterial buffet. Using the broth microdilution method, I ran both Minimum Inhibitory Concentration (MIC) and Minimum Bactericidal Concentration (MBC) assays to see whether BSO could stop bacterial growth or take the cells out completely. The results show BC responded with a white, cloudy mess which is basically its way of saying, "Nice try, but I am still very much alive." EC and PA results were pending at first, but now that the plates have been checked, here is what happened: EC remained cloudy up to well 9 and PA showed its signature green pigmentation all the way up to well 10.

This study will help determine whether black seed oil is a genuinely promising natural antimicrobial or just something that promotes as "healthy". As more data comes in (especially with the updated incubation time) I will be able to see whether BSO has potential or if the bacteria are just sitting there laughing at my efforts. Overall, this research has opened my mind and sparked a deeper curiosity about what is really happening at the microbial level.

## **9:20 – 10:30 a.m. | Session A4 ICB 206: Embodied History/Embodied Politics**

### **Explaining the Shift: The Democratic Party and the Hispanic Vote**

Leonidas Contreras, College of the Mainland | Advisor: Shinya Wakao

The 2012 Presidential Election was a victory for the Democratic Party, with Barack Obama being elected for his second term. I argue that this was the start of a pattern of political turnover, as we would see Republican President Donald Trump elected, immediately followed by the Democratic Joe Biden. Throughout these elections a trend emerged amongst voters of a Hispanic ethnicity. While Obama managed to secure a whopping 71 percent of Hispanic voters, the Democratic Party experienced a serious decline in support from this ethnic group, culminating in an almost 50/50 split in the most recent Kamala Harris vs. Donald Trump election.

The key to understanding this decline in support requires an examination of the Hispanic identity and socioeconomic characteristics. By analyzing this data and campaign strategies used, I argue there is a correlation between candidates who campaign on economic issues and Hispanic voting behavior. Since 2012, candidates who placed emphasis on social issues or middle-class policy saw a decline in Hispanic support, while candidates who focused on lower income economic reform frequently saw the opposite effect. Using exit polls and survey data, I will corroborate my hypothesis.

## Voting Apathy: The Key to Voter Mobilization

Kaneeze Batool, Houston City College – Northwest |  
Advisor: Simone Gardiner

Texas, despite being the second most populous state in the United States, consistently reports some of the lowest voter turnout rates in both federal and state elections. This persistent trend raises significant concerns regarding democratic participation and equitable political representation. Multiple factors contribute to low turnout, including restrictive voting laws, demographic and socioeconomic challenges and a political climate shaped by decades of single-party dominance since the 1980s. These conditions have contributed to widespread voter apathy, a phenomenon in which individuals perceive their vote as inconsequential and therefore don't participate.

The study examines the relationship between age demographics and political engagement in Texas. The survey universe is divided into three groups: new voters, middle-aged voters and older voters. The primary objective is to identify which age groups demonstrate the highest levels of political understanding and engagement. While younger voters are generally adept at navigating online information and being politically "woke," older voters have historically exhibited the highest voter turnout and consistent civic participation. By analyzing generational differences, this study seeks to provide insight into the underlying cause of lower voter turnout in Texas and to suggest strategies for fostering voter mobilization across all age groups.

## The Enduring Legacy of Jim Crow

Daju Helaire, San Jacinto College | Advisor: Nicholas Coulombe

This paper aims to analyze Jim Crow in Texas during the late nineteenth and early twentieth centuries as a deliberately constructed legal system that did more than reflect racial prejudice; it organized, justified and socially established racial hierarchy through law. By considering education policies, labor and political access, I argue that segregation and disenfranchisement persisted not despite of the law, but because of the continuous reinforcement that came through statutes, constitutional principles and legislative agendas that claimed neutrality while maintaining inequality. Looking at the state constitution, the court decisions and current policy, this paper will highlight how Texas law created and reestablished institutional injustice that has persisted long after the Jim Crow laws were dismantled. Understanding the lasting impact of Jim Crow legislation, I challenge the assumption that neutrality alone can produce true justice in a society that has been shaped by an unequal foundation. This analysis frames Jim Crow as not another closed chapter in America's dark history, but a concept that has continued to influence American law and society.

## Avoiding Bias in the Interpretation of History

Vivian Montelongo and Tyre'Onna Woods | Advisor: Nicolas Rangel

Discussing the complexity behind the ethical responsibility of historians to formulate the most accurate interpretation of history possible is important, as the way history is interpreted influences how all students and scholars learn about the significant events of the past and even contribute to modern politics today. This project studies the ability to manage the inevitable bias in history while aiming to answer the question:

to what extent can historians manage bias when it comes to the usage of charged words? By using primary and secondary sources when analyzing original historical documents such as Nazi propaganda, as well as examining peer-reviewed articles that support the analyses and studies that confirm the limitations in bias. This project aims to explore the effects of different usages of charged words that hold emotional connotations while also considering the limitations of managing bias with charged words due to the subjective nature of first-hand historical accounts and historians with personal perspectives.

## 9:20 – 10:30 a.m. | Session A5 ICB 221: Financing the Self

### Knowing the Price of Care: Financial Structures, Lived Bodies, and Ethical Authority in American Healthcare

Cora Thomas, College of the Mainland | Advisor: Siromi Wijesinghe

This project's argumentative scope focuses on how the U.S. healthcare system is not only an economic institution, but also an embodied knowledge system that determines whose experiences, those of both patients and healthcare workers, count as truth. Using business and economic frameworks, the project examines hospital operating costs to explain why routine care, medication and surgeries cause widespread medical debt and bankruptcy. Policy evidence including COBRA coverage gaps, claim denials and vertical integration among megacorporations like CVS Health that combine pharmacy, insurance, and pharmacy-benefit management, shows how patients are recast as consumers navigating a controlled marketplace.

Worker testimonies and staffing data further reveal how unsafe patient-to-staff ratios and physician disputes with insurers affect people's lives, not just budgets. A comparison with universal healthcare systems globally highlights how taxation versus private insurance cost redistributes risk and knowledge about medical care. The project interprets the body as an archive within the healthcare system. Patients and providers "know" the illness through lived experience, yet financial and institutional authorities claim ownership over that knowledge. By decoding economic records alongside embodied suffering, the research asks who has the power to define medical truth and how healthcare might be ethically recoded.

### The Growing Importance of Financial Literacy Among College Students

Syed Ahmad, Houston City College Northwest Spring Branch |  
Advisor: Simone Gardiner

Many college students face increasing financial responsibilities while lacking sufficient financial literacy, and this gap reflects a disconnect between academic education and the practical financial demands students face in adulthood. This issue is especially important today and in future is due to many factors like inflation, student loans, credit cards, and tuition cost. As a result, it is important to know how to budget, manage, calculate interest rates and plan long term financially. Financial literacy is essential to make informed decisions and achieve long term stability. A lack of financial literacy can lead to poor financial decisions, increased financial stress, and long term consequences, including poor credit scores and missed

payments. This presentation will explain the causes of financial literacy gaps among college students, such as limited financial education in high school and the absence of required financial literacy courses in higher education. It also explores potential solutions for integrating financial education into college curriculum to promote informed decision-making, reduce financial vulnerability, and strengthen long-term economic stability among young adults.

### **Navigating Rising Costs of Tuition and Building Wealth to Create Financial Independence**

Geovanny Yanez, College of the Mainland | Advisor: Siromi Wijesinghe

This project examines college budgeting as a form of embodied knowledge. While the rising cost of higher education is often discussed through statistics and institutional language, this presentation focuses on the lived experience of managing expenses as a college student. By breaking down the real costs of attending college such as tuition, housing and food, it highlights the budgeting strategies students must adopt to ensure financial survival and reveals how these practices shape the way the concept of money is understood and valued. Establishing a strong foundation in managing essential expenses allows students to develop a basic but critical understanding of personal finance.

Personal finance and financial literacy are rarely taught within public school curricula, creating significant knowledge gaps that often lead to poor financial decision-making in adulthood. The scope of this presentation is to connect the embodied knowledge gained through college budgeting to broader wealth-building concepts. Financial formulas such as the Rule of 72, investment strategies and retirement accounts including IRAs and 401(k)s are introduced as tools for achieving long term goals, such as homeownership and, ultimately, financial independence through investments, stocks and dividends.

### **Federal Reserve and the Economy**

Janis Richards, San Jacinto | Advisor: Cody Pogue

My research topic related to this subject is decoding and recoding my understanding of money. To accomplish this, I will explore the history of money as it informs current views on the purpose and usage of money. This history includes the formation of the U.S. Federal Reserve. The Federal Reserve set up money to be created and paid out to the U.S. economy by a private banking group. This group charges the Federal Government interest on every penny and dollar it creates. From this, I will explain my view of current usage of money and the apparent reasonings for such usage and related justifications. In conclusion, I will suggest a plan for the creation and usage of money that will seem to solve money problems we are now having in our economy. Workable answers could have a significant impact on our own economic life and could positively impact an economically struggling world. My research will consist of past and current historical records that address economics and related subjects. The research will primarily be done with secondary sources. A close examination of competing views will help create a source of comparison for judging my own evaluations and suggestions.

## **9:20 – 10:30 a.m. | Session A6 ICB 227: Caring for the Self in Social Media**

### **Prayers vs. Posts: Religious Coping and Mental Health Outcomes in the Age of Social Media**

Abigail Plew, College of the Mainland | Advisor: Anthony Cavazos

Social media usage and mental health issues are at an all-time high. Research has already proven that social media can negatively impact mental health and that spirituality and religion can positively impact mental health. Many studies have shown that higher levels of spirituality and religion are associated with lower levels of depression, whereas the more time spent on social media sites often meant higher levels of depression. The goal of this presentation is to investigate the ability of spirituality and religion to act as a moderator for the adverse effects on mental health caused by social media in Gen Z. The data used was collected from numerous preexisting studies and from a survey that we will be conducting to investigate the potential moderating effects of religious coping and spirituality in Gen Z Americans aged 18-27. While many people have already developed theories on how these two factors would interact with each other to impact mental health, very little research has been done on the specific topic, which is why the findings from this presentation will be worth hearing about.

### **Social Media Addiction From Biological Standpoint**

Vladyslava Tyshko, Houston City College – Northwest |

Advisor: Simone Gardiner

Currently, young adults are viewed as one of the most depressed and anxious generations. With the introduction of social media and an overabundance of information, natural adolescent brain development is increasingly influenced and interrupted by evolving technologies, contributing to growing concerns regarding mental health and adolescent neural network development. The adolescent brain is an organ developing and growing at a rapid pace, and disruption of the reward system, impulse control, and emotional regulation may lead to consequences we are yet about to understand.

The main purpose of this presentation is to help the audience recognize and truly understand that the human brain is far more sensitive than commonly assumed, and that everything in our environment leaves a footprint within the neural network. In this work, I attempted to dive deeper into the long-term consequences of repeated social media usage, compare device usage to real addiction patterns, and study the nature of these self-destructive behaviors. By including examples from everyone's everyday life, this presentation seeks to encourage audience to reflect on their own personal social media use. I used peer-reviewed research articles, surveys, and data tables to gather and analyze the information necessary to support my claims.

### **Decoding the Knowledge of Social Media Exploitation: Protecting Minors in the World of Social Influencers**

Kimberly Piña, Brazosport College | Advisor: Carrie Pritchett

Social media and influencer culture have led to the rise of unchecked child exploitation and potential abuse. This research project addresses the alarming spike in the number of parents and guardians who use social media to earn a livable wage by

exploiting their children through social media content. Paraded in front of the camera for the world to see, some children face harsh conditions where they have no agency to consent. There are countless examples of children who face abuse for not complying with their parents' command to be filmed. In most instances little to no financial compensation is given to minors and they are vulnerable to potential bad actors in the online world. Many content creator parents know no boundaries in seeking "likes," "subscribes" and "follows." Slowly, some states are enacting laws that address this relatively new form of exploitation and potential abuse. This is new territory, and there remains much work to do in creating safety protocols for child labor in social media to prevent children from being overworked or mistreated in these environments. Past victims have taken the lead in making substantive changes. Time will tell if the efforts lead to new federal laws and protections.

### **The Price of Innovation**

Dannie Bannister-Yarde, College of the Mainland | Advisor: Monique Suarez

This project explores how the digital world has impacted human connections and mental health. When social media is the hub for communication and errands can be done from home, can humans retain the relationships we once had? If not, how can that affect our well-being? I use scholarly, peer-reviewed secondary sources alongside my personal experiences to explore how a loss of emotional connection with others and self-isolation can affect the brain. We have constant access to new information, opinions and campaigns designed for our attention. This unfiltered rush can overstimulate and desensitize us. As the world around us changes and reforms how society functions, there is a trade-off for efficiency. The purpose of this project is to inform the audience of the price we pay for innovation in terms of human connection and our mental health. Only when we are aware of the mental cost can we make an informed decision about how to move forward.

## **9:20 – 10:30 a.m. | Session A7 ICB 228: The "I" in Im/migration**

### **Embodied Knowledge: How Migration and Work Reshaped My Sense of Self**

Linh Phung Quan, Houston City College – Eastside | Advisor: Toni Holland

Who I am today began taking shape long before I arrived in the United States. Growing up in a traditional family and working in Vietnam, especially in hospitality and banking, taught me how to be responsible in everything I do, attentive to others and aware of the small ways care can appear in everyday interactions. At the time, I thought I had a clear understanding of myself. Life felt familiar and my direction seemed steady, I thought that my life would remain the same for at least a long while. Migration changed that. Stepping into a new culture challenged the version of myself I had quietly accepted and pushed me to see my experiences through a different lens. Rather than erasing my past, the transition helped me recognize how deeply it continues to guide me. Over time, this reflection led me toward nursing, not as a sudden decision, but as a natural extension of the values that had been forming within me for years. It made me realize that what we learn is not shaped only in classrooms, but through the lives we live, the risks we take and the moments that ask

us to grow. I have come to understand embodied knowledge as something carried within us, constantly evolving as we move forward while remaining connected to where we began.

### **Decoding the Accent: Language, Identity and the Embodied Archive**

Vivian Varela, Houston City College | Advisor: Nicolas Rangel

Language is not solely a cognitive system; it is embodied practice. It lives in breath, articulation, rhythm and memory. Chicano English—a systematic and rule-governed variety of American English spoken within Mexican American communities across the United States—exists as living knowledge carried through the body. The accent remembers histories of migration, community formation and cultural continuity. Yet despite its legitimacy and widespread use, Chicano English is frequently mischaracterized as incorrect or conflated with Spanglish.

This study examines how such misrecognition reflects broader language ideologies that privilege standardized forms of English while marginalizing other varieties. Although millions of Hispanic Americans report strong English proficiency, Chicano English continues to be interpreted through deficit frameworks. In contrast to Spanglish, which involves code-switching between Spanish and English, Chicano English is a stable dialect with identifiable phonological, syntactic and lexical features.

Drawing on sociolinguistics and language ideology research, this project argues that Chicano English functions as embodied cultural memory. When institutions fail to recognize its systematic structure, they overlook the knowledge embedded in sound and cadence. To acknowledge that the accent remembers is to expand our understanding of language as lived, inherited and socially meaningful knowledge.

### **Struggles of Mexican Immigrants**

Melanie Delgado, Houston City College | Advisor: Toni Holland

Do people truly achieve understanding. Even after the massive amount of information we have access to, we often choose to avoid confronting the truth and instead, we insist on sticking to personal belief. At times, we maintain harmful ideas simply since we believe our views on things are correct. While humans have flaws, it does not justify the poor treatment of immigrants. Even though we may differ in appearance, language and origin, the humanity that we share remains within us, but why do we not realize it? Having to witness someone being mistreated by another person because they have a sense of superiority is truly troubling. Many continue to discriminate against immigrants solely because they left their home countries in hopes of better opportunities for themselves and their families.

### **Not from Here, Not from There: Rethinking Immigration Through Symbolic Interactionism**

Debanny Cruz, College of the Mainland | Advisor: Will Bryerton

The sociological theory of symbolic interactionism can be used to understand the unique experiences, aspirations, expectations and challenges of immigrants better than the preconceived notions that pervade contemporary discourse in America. Those who carry the label "immigrant" do not merely arrive in a new society; they undergo a transformation that is at once personal and social, private and performed, driven by the need to survive

and the desire to flourish for themselves or their loved ones. Immigrants' memories, emotions and sense of self are reshaped under the demands of social institutions, labor markets, hierarchies, stigmas and statuses. Using qualitative testimonial evidence, I will highlight the resilience and transformation of immigrants' memories and emotions within the new nation and culture. Drawing upon symbolic interactionism's insight on meaning-making within social interactions, I will explain how immigrants decode cultural elements and develop a "third culture" of their own.

## 9:20 – 10:30 a.m. | Session A8 ICB 318: Health, Happiness, y El Cuerpo

### **The Science of Eating: How Hidden Sugars Steal Student Focus and Practical Recipes to Reclaim Your Energy**

Theint Theint Thu, Houston City College – Central | Advisor: Nicolas Rangel

This project is about what sugar is doing to our body and to share about serious health concerns because of sugars. I will talk about when we should eat sweets and how we should start our days to be productive without being sleepy and heavy the whole day. I understand it needs to be practical because everyone cannot cut sugar, as most of us love sweets. However, I have been developing healthy, quick and affordable recipes for students like us and have been monitoring me and my friends' diet styles and how we perform throughout the day. This is not scientific research, but I have tried my best to eat healthy food, recommended by the video resources I provided, since it has been helpful for me to keep productive and active throughout the day without being sleepy and it is just so efficient to study and my mind is also fresh. I would like to share my project that they don't need too much caffeine or energy drinks to keep them awake during their downtime hours to study, but all they need is to know what to eat when to eat and sleep enough to boost their energy naturally.

### **Keeping Your Mind and Body Happy**

Jolie Van Houten, College of the Mainland | Advisor: James Mubiru

This presentation focuses on the importance of maintaining an individual's physical health and how doing so positively affects mental well-being. Keeping your body healthy should be a priority, whether through regular exercise or making healthier food choices. Maintaining physical health not only improves strength and endurance but also plays a major role mentally. When individuals commit to taking care of their bodies, they often develop greater discipline, confidence and a growth mindset that carries over into other areas of life, such as academics, work and personal goals. Powerlifting allows individuals to embrace being an athlete while improving both physical and mental health. Powerlifting also encourages mental toughness, as progress requires patience, focus and the ability to push through challenges while still respecting personal limits. This sport has shaped me to become a better version of myself. Believing in myself was hard to learn at first but in doing so I can be there for others when they are doubtful in their abilities. It has helped me grow closer with my teammates and learned that not everyone sees you as competition and you should not either.

## **Mastery in Motion: Self-Efficacy, Exercise and Academic Persistence in Community College Students**

Christopher David Perez, Houston City College | Advisor: Nicolas Rangel

This project examines how aerobic exercise may support academic persistence in community college students by strengthening self-efficacy through mastery experiences. Community college students often balance coursework with employment, family obligations, and financial stress, which can weaken academic confidence and increase the risk of withdrawal. While exercise is frequently discussed to reduce symptoms of depression and anxiety, this paper focuses more specifically on the psychological mechanism of self-efficacy. Drawing from Social Cognitive Theory and peer-reviewed research linking physical activity to improvements in perceived competence, mood regulation, and behavioral persistence, this integrative literature review argues that repeated physical mastery can influence how students evaluate their ability to meet academic demands. The project connects exercise-based interventions to broader conversations about student retention and institutional belonging. By centering self-efficacy as a mediating factor between physical activity and persistence, this research proposes a focused framework for understanding how structured exercise programs may indirectly support academic engagement in community college settings.

### **Black Seed Oil – The Hidden Gem**

Hanh Nguyen, College of the Mainland | Advisor: James Mubiru

Black seed (*Nigella sativa*) has been used for nearly 2000 years across the Middle East as a traditional remedy for a wide range of ailments. It is referenced in several historical and religious texts, reflecting its long-standing cultural and medicinal significance. Despite this extensive traditional use, modern scientific investigation into its therapeutic properties remains relatively limited. Existing studies suggest that black seed oil (BSO) possesses notable anti-inflammatory, antibacterial and antiparasitic activities.

The global rise of antibiotic-resistant bacteria intensified the need to identify novel antimicrobial agents derived from natural sources. Our laboratory initiated a series of experiments to evaluate its effectiveness against selected bacterial species. These studies aim to characterize the extent of BSO's antibacterial activity and assess its potential as a complementary or alternative therapeutic option. Preliminary results from our ongoing research indicate that black seed oil exhibits measurable antibacterial effects, supporting historical claims of its medicinal value. Continued investigation will focus on determining its mechanism of action, optimal concentrations and spectrum of activity. This work contributes to the growing scientific interest in plant-based compounds as promising candidates in the fight against antibiotic resistance.

## 9:20 – 10:30 a.m. | Session A9 ICB 319: COM's Literary Journal: *The Badelynge Review* | NONJURIED SESSION

Advisor/Moderator: Gwendolynn Barbee-Yow

Students Featured: Mya Moore, Darian Russell, Coralyn Shirley and Ysaac Stowe

*The Badelynge Review*, our student staffed literary journal here at College of the Mainland, consists of readers (evaluators of submissions), editors (who work with authors to refine accepted work) and reviewers (who check the credibility of submitted academic essays). Who all work together to evaluate the future publications of poetry, short fiction, creative nonfiction, academic essays and art in the yearly journal releases. As we have garnered more staff year after year, we want to allow our readers, editors and reviewers to discuss the process of running the journal and how essential student involvement is the process of the publication of each year's journal. Lastly, we want to discuss the future of *The Badelynge Review* and how we can continue to evolve our process of publishing and how we can push our club to a higher level.

## 10:40 – 11:40 a.m. | Session B1 ICB 201: The Science of Stress

### When Stress Becomes Cellular: Telomeres and the Biology of Adversity

Favour Sydney-Akaninwor and Na Li, Houston City College – Northwest Spring | Advisor: Simone Gardiner

If the human body is like an archive, every piece of gene is like a book. Telomeres, the “books” stored on the shelf of DNA, are protective, repetitive DNA-protein structures located at the ends of eukaryotic chromosomes. They consist of (TTAGGG)<sub>n</sub> sequences that act like plastic tips on shoelaces, preventing degradation and genetic fusion to ensure genomic stability. While telomeres naturally shorten by 50–300 base pairs with each cell division, factors such as chronic stress, smoking and poor diet can accelerate this process, leading to premature cellular senescence. This research explores the relationship between psychological stress and telomere length (TL) in humans, summarizing recent findings and providing evidence-based lifestyle recommendations.

We explore various systematic literature across multiple databases. It displays recent findings that life-long exposure to stress, beginning in the prenatal period, can significantly shorten telomeres and mediate the early onset of age-related diseases. While genetic factors influence 34%–82% of TL variation, environmental and lifestyle factors are powerful modulators. Higher psychological stress is linked to shorter TL, particularly in women and those facing major life stressors. Key recommendations for preserving TL include robust stress management, regular physical activity, healthy sleep habits and strong social support. The stress-telomere axis represents a dynamic system where psychological health directly influences cellular longevity. Future healthy aging strategies should prioritize holistic interventions that combine stress reduction with healthy lifestyle behaviors to extend the human health span.

### Cardiovascular Responses to Academic Stress: Heart Rate Variability in Students

Jennifer Perez, Galveston College | Advisor: Alex Peniche

My research project investigates whether heart activity changes under stress and explores factors that impact heart rate stability during exams. I started this research to see as a college student

how much stress we put on ourselves and can influence our long-term physical health. The cardiovascular system plays a key role in the body's stress response. During psychological stress, like taking an exam, hormones such as epinephrine and norepinephrine are released, raising heart rate and blood pressure, which can hinder focus. The research aims to find out if psychological stress, such as exam stress, causes significant changes in heart activity compared to normal days. It will also explore whether other factors, like sleep or caffeine, affect how stable heart rate remains during exams. I think this research is important because it helps professors and teachers facilitate a better college environment during exam weeks. This can also help students be aware of their health when going into college.

### Embodied Knowledge Through Performance Anxiety in Colorguard

Rafaela Pimentel, Houston City College – Central | Advisor: Nicolas Rangel

Knowledge is often understood as something learned through reading, thinking, or observation; however, the body itself also serves as a powerful archive of knowledge. In physically demanding activities such as colorguard performance, the body becomes a tool that stores information and it learns through movement, repetition and emotional experience rather than through cognitive understanding alone. As a former performer, I learned to interpret my body's physical responses to performance anxiety, coordination challenges and muscle memory to improve my skills. Over time, I began to understand what these bodily reactions mean and how to manage them effectively. This process reflects the idea of decoding the self by recognizing the body's messages and recoding the self by training new responses. Through this, colorguard demonstrates embodied knowledge because performers learn to transform physical experience into confidence, control and expressive performance.

### Decoding the Stress Response: Embodied Knowledge and Resilience in Nursing Education

Sydney Carvajal and Adrienne Courteau, College of the Mainland | Advisor: Rachel Fano

This project explores the nursing body as a primary archive of clinical stress, moving beyond traditional cognitive management to examine “embodied knowledge.” In the high-stakes environment of a nursing program, the body is aware of burnout well before the mind can label it. Stress is a physiological code that manifests in many ways such as cortisol spikes, muscle tension and sensory overload. By utilizing these somatic signals as data, we can investigate how nursing students can decode their autonomic nervous systems' response. We will investigate the process of recoding oneself through evidence-based stress management interventions. Stress management such as mindfulness, breathing techniques and cognitive reframing. These practices are done to rewrite the body's default reactive scripts. By merging the hard sciences of physiology with the humanities' focus on self-actualization/potential, this project highlights that one of the most critical knowledge a nurse possesses is the ability to maintain their own integrity while navigating the complex and rigorous demands of the seemingly never-ending deadlines and clinical sacrifice.

## 10:40 – 11:40 a.m. | Session B2 ICB 203: Human Creativity

### **The King Who Could Not Escape Fate: The Story of *Oedipus Rex*, Translated to Reach a More Inclusive Audience**

Angelica Black, College of the Mainland | Advisor: Stacey Burleson

The tragic play of *Oedipus Rex* dates to 429 B.C. The play is originally written in ancient Greek. I researched different English versions that had been translated throughout history. With the translated versions, I was able to simplify the story in a way that made it easy to read for a more inclusive audience, allowing people who may not have previously understood the story to be able to read and learn about it. With this simplified version, I created a storybook with illustrations that were hand-drawn and then turned that into a small film with my voice reading the story. Being able to research and translate this story in a way that allows others to understand contributes to growing one's knowledge.

### **Chained**

Noel Lewis, San Jacinto College – South | Advisor: Judith Maime Skeele

This project argues that trauma can still affect someone even if they don't clearly remember it. Instead of showing up as memories, trauma can appear through the body in emotions, behaviors and reactions during normal daily activities. The project looks at whether a person can function in the present while their body continues to respond to past experiences. It also suggests that creative writing can help someone better understand these reactions and begin the process of recording themselves.

Chained is an original piece of writing inspired by the documented voyage projected by a mother's routine driving. Even though physically she is driving, emotionally she finds herself in an embodied prison of a daydream of past trauma from her childhood. The project also uses trauma research, *The Body Keeps the Score* to explain how trauma can be stored in the body and expressed in the future. This project connects to the theme of Embodied Knowledge: Decoding and Recoding the Self by showing how the body holds knowledge from past experiences. Through creative writing, these bodily responses are turned into a story, which helps decode what the body is communicating and allows the narrator to begin recoding the self.

### **"H@yw1r3": Man Lost to Time and Technology; An Original Work**

Audrey Jian Iletto, College of the Mainland and Clear Falls High School | Advisor: Sean Curcio

"H@yw1r3," pronounced "Haywire," is an original story I wrote about a man who loses himself to time and technology. He continues with what he loves: teaching and traditionally bringing forth forms of art and their history to the young and naïve in the futuristic world where everything has a 'better' copy. He is granted another chance to prolong his career within his last waking hours by replacing his body parts. His life might beg the question of whether immortality is a blessing or a curse, as he repeatedly and deprecatingly asks himself, "Why we are human," lying awake while nails are literally screwed in place of his tendons. All he has to do is press a button, and an endless stream of information will come trickling into his brain. An indestructible machine, an

infinite generator, a superhuman with nerves made of circuits. This very man's eyes will record the leftovers of our originality, consumed by the greed of technology.

### **Hybrid Identity Exhibition Project**

Alissa Reyna, College of the Mainland | Advisor: Mark Greenwalt

This project investigates the merge of human and animal forms to explore transformation within the self through visual art. By creating a series of visual studies that morph human and animal figures. This study positions morphing as both a method and metaphor for self-exploration through cultural, psychological, and biological influences. Drawing inspiration from mythological hybrids, biomimicry, and traditional manipulation graphite techniques, the work examines how external forms reflect the internal states and how they can be *recoded* through visual representation. The project shows evidence of recurring patterns in transformation, gestures, postures, and expressions that reveal subconscious traits of the identity expanded in animal forms expressing new narratives about identity, empathy, and evolution. The theme "Decoding and Recoding the Self" in this exhibition traits into hybrid forms and recoding them through art. The project's outcomes aim to foster a dialogue on how artistic practices reshape understanding of the self.

## 10:40 – 11:40 a.m. | Session B3 ICB 204: Technological Falsehoods and Humanity

### **Decoding Political Falsehoods in Social Media: Russia's Internet Research Agency and the Architecture of Disinformation in the United States**

Sabir Fisher, Brazosport College | Advisor: Carrie Pritchett

Between 2012 and 2016, Russia's Internet Research Agency (IRA) developed a hierarchical system for funneling Americans toward coordinated disinformation—a playbook that has since been adopted across the political spectrum. By analyzing a vast amount of IRA tweets, this study explores the underlying structure of decoding and recoding political thought: peripheral accounts capture new users, platform algorithms push users deeper, and coordination hubs amplify content through recursive engagement. Further analysis through Eigenvector centrality also concludes that network position—not audience size—drives amplification.

The IRA's operation ended, but the architecture persists. The same structural signatures, fear appeals, tribal framing, and algorithmic exploitation now appear in domestic influence operations on both the left and right. By comparing the IRA's documented tactics to contemporary social media content, this research demonstrates that the goal remains constant: division. Recognizing these patterns is the first defense against manipulation from any source.

### **The Philosophy of Man and Technology**

Ariel Giwa-Amu, Houston City College – Northwest | Advisor: Simone Gardiner

Man has developed alongside technology, growing from the Stone and the Iron Ages, till finally, our Electronic Age. We have progressed from Morse code receiving telegraphs to generative

AI with quantum computing potential. However, while these discoveries have had their benefits, they also raise concerns about what the future of mankind holds.

Throughout my life, I have observed people with varying exposure to technology and witnessed their rapid development's influence on both young and seasoned minds. As I aspire to be a neurosurgeon, I have studied the brain extensively and learned that the reality of a person resides within, and through careful observation, actions tell a different story. This research examined how people are influenced by various ages of technology and the hope, despair, and discernible change it brings as they hope for something greater. My methodology involved conducting anonymous online surveys to get unbiased views on how various technological advances were perceived and impacted individuals. I also reviewed peer-reviewed academic and philosophical articles to understand how this may have changed over time. Based on these results, rather than conclusions, I asked a new set of questions concerning the future of mankind. However, one remained constant – what's next?

### **We, the Programmed: Corporate Control over Society in Dystopian Sci-Fi Films & Anime**

Aiden Mena, Lone Star College-Kingwood |  
Advisor: Mari L. Nicholson-Preuss

Behind its futuristic façade, dystopian science fiction portrays technology as an instrument of corporate power. This case study examines three works of the genre: *Blade Runner* (1982), *WALL-E* (2008) and *Serial Experiments Lain* (1998). Through Foucault's theory of surveillance and Marx's critique of capitalist labor, alongside other scholarly perspectives, the study aims to explore how through technology, corporate control shapes identity, social structures, and the environment. Using thematic and visual analysis, the research identifies patterns of exploitation, social stratification, and ecological degradation. The study concludes that *Blade Runner* exposes class hierarchies and commodified life; *Serial Experiments Lain* reveals psychological disruption under pervasive digital networks; and *WALL-E* critiques monopolistic corporations that foster technological dependency and environmental collapse. Across these works, the dystopian narratives show how corporate authority infiltrates into intimate spheres of labor, identity, and the human relationship with the environment. This research emphasizes the urgent need to analyze technological dependence and corporate influence and illustrates how fictional narratives can reflect real-world consequences of unchecked corporate power.

### **The Impacts of Deepfake Technology in Media & Politics**

Mineva Moutcheu Deuffi and Tyler Sumpter, Houston City College – Spring Branch | Advisor: Simone Gardiner

Deep fake technology has become one of the most overtly controversial tools of modern politics and modern media. What began as an advancement in artificial intelligence and digital editing has morphed into one of the most powerful tools for shaping opinion and for shaping the “truth.” Within a richly layered media landscape, the proliferation of deep fakes shifts the challenges of disinformation, the ethics of journalism, and the provenance of visual media evidence into warp speed. In the political realm, the more sinister societal and ethical challenges

posed by deep fakes include the potential for electioneering malpractice, the dissemination of counterfeit and reputationally devastating narratives, and the destruction of a person's reputation. This presentation examines the impact of deep fakes on public trust, accountability, and the intersection of technology and democracy. It aims to articulate the potential and the peril of this technology, drawing on a review of contemporary literature, evidence from the field, and the views of authorities on the subject. Deep fakes are a testament to the impact of advanced AI, and equally, the evidence of how fragile something like “truth” can become when technology is unleashed without an ethical framework. This discussion proposes the need for media literacy, a discussion rooted in a demand for more regulation, and overall, a plea for the balancing of innovation and social responsibility.

## **10:40 – 11:40 a.m. | Session B4 ICB 206: Decoding Crime and Violence**

### **Neuroscience in Forensic Investigations**

Alexia Castillo, College of the Mainland | Advisor: James Mubiru

This presentation explores whether neuroscience can meaningfully assist forensic investigators in criminal investigations. As forensic science continues to evolve, neuroscientific tools such as brainwave analysis, neurotoxin-related symptom evaluation, and neural biomarkers have emerged as potential supplementary methods. This study examines brain fingerprinting and P300 responses in deception detection, analyzes neurological symptom progression in toxic poisoning cases, and evaluates the role of biomarkers in determining cause of death. While these applications demonstrate promising potential to provide measurable biological insight, their reliability, courtroom admissibility, and ethical implications remain under ongoing evaluation. Neuroscience is best understood not as a replacement for traditional forensic methods, but as a developing complementary tool that may enhance investigative accuracy. Continued research and legal scrutiny will determine the extent of its future role in forensic investigations.

### **The Role of Culture in Peer-Initiated Sexual Abuse Perpetration Among Adolescents: A Cross-Cultural Analysis**

Favour Ogbonna, Lone Star College CyFair | Advisor: Aurora Lugo

To understand the role of culture in peer-initiated sexual abuse (PISA) perpetrated by adolescents aged 13-18, this study analyzes PISA risk factors identified in research from 8 countries over the past 15 years. Juveniles accounted for approximately 17% of sexual crimes in the U.S. in 2015 a trend mirrored by rising rates in other nations making PISA a significant global public health issue. Yet most research is Western-centric and focuses on victimization rather than perpetration. This study employs a socio-ecological framework to analyze research on PISA from 8 countries: the United States, South Korea, Switzerland, Norway, Sweden, Nigeria, Ethiopia, and Sierra Leone. These countries were chosen to represent Western and non-Western regions for cross-cultural analysis. The studies examined focus on physical peer-on-peer sexual abuse among adolescents, drawing from the works of Tharp et al., who

identified PISA risk factors from 191 studies, and Delago et al., who retrospectively reviewed psychological charts of juvenile PISA perpetrators and identified their key characteristics. Findings suggest sexual victimization, exposure to sexually explicit media (SEM), and family Adverse Childhood Experiences (ACEs) are common risk factors across the 8 countries studied. However, to fully understand how culture influences PISA, future research needs to explore how multiple risk factors interact and establish causal relationships beyond correlations. This will aid in developing more effective prevention strategies against adolescent PISA.

### **The First Detective: How Edgar Allan Poe Trained America to Solve Crimes**

Lylah Martinez, Lonestar Kingwood College | Advisor: Mari Nicholson-Preuss

The morbid fascination humankind has with crime appears ubiquitous. This research explores the detective trilogy of Edgar Allan Poe and how he capitalized on people's obsession with the macabre and tied it into the even greater desire for a solution, or "order out of disorder," with an aim of arriving at possible explanations for the ongoing appeal of detective novels. An archival analysis of Edgar Allan Poe's detective trilogy and secondary sources, such as Stephen Knight's commentary on Poe's literary genius and John Tresch's criticisms of the scientific aspects of this trilogy, provides evidence that Poe's work not only created the detective genre, it reveals that the character development of detective Auguste Dupin and his varied case frameworks created the foundation for many of the genre's central conventions. Additionally, through the brief analysis of the impact upon future detective writers, such as Arthur Conan Doyle and Agatha Christie, Poe's influence is clearly revealed. Future research could access the poems and other writings of Poe from a psychological standpoint to further understand the author's techniques. It is imperative that humans recognize their most primal need for intellectual stimulation using their reasoning.

### **State-Sanctioned Violence: The Texas Rangers and the Lynching of Chicanos**

Alazae Martinez, College of the Mainland | Advisor: Dale Serda

In the early 1900s, members of the Texas Rangers were involved in widespread violence against Mexican and Mexican American communities along the Texas-Mexico border, which is now known as "La Matanza." Rangers and other law enforcement officers carried out many extrajudicial killings, beatings, and acts of intimidation, often without facing consequences. These actions were usually justified as necessary to stop banditry or control unrest during and after the Mexican Revolution. However, the violence overwhelmingly targeted ethnic Mexicans, including many who were U.S. citizens. Because of the scale of the killings and the clear racial targeting, some historians and activists argue that what happened amounted to a form of genocide against the Chicano community. Thousands of people are believed to have been killed during this time simply because of their ethnicity and skin color, leaving lasting fear, trauma, and injustice that still shapes conversations about Texas history today.

## **10:40 – 11:40 a.m. | Session B5 ICB 221: Nature +/- Nurture**

### **The Body as Archive: Biological Coding, Embodied Knowledge and the Intelligence of Living Systems**

Sedonia Lanette Clark Robinson, Houston City College |

Advisor: Teresa Washburn

This project examines embodied knowledge through the lens of human biology, positioning the body as a living archive encoded with chemical, genetic, and immunological information. At a fundamental level, the body operates as a complex system in which elements, cells, and DNA interact to sustain life, adapt to environments, and respond to threats. Long before knowledge is articulated through language or formal education, the body already knows how to heal, resist infection, and remember.

Drawing on concepts from the hard sciences alongside critical discussions of embodiment, this work explores decoding and recoding the self as both biological and epistemological processes. Genetic inheritance, immune memory, and cellular response demonstrate how knowledge is transmitted, stored, and modified across generations. When the body encounters illness, it decodes foreign agents and recodes itself through adaptation, revealing an intelligence that exists beyond conscious thought. By framing the body as both a scientific and philosophical site of knowing, this project challenges hierarchies that privilege disembodied cognition over material experience and argues for an expanded, interdisciplinary approach to truth-making within the body politic.

### **Nature, Nurture, and the Making of Extreme Behavior**

Alinna Garza, Houston City College – Eastside | Advisor: Toni Holland

Human behavior is shaped by a complex interaction between environmental upbringing and genetic inheritance, both of which can be detrimental in certain contexts. This interaction can be observed across all areas of human development and is often illustrated through extreme cases, such as serial killers, which highlight the consequences of disrupted biological and environmental influences. Scientific research suggests that neither genetics nor environment acts in isolation; rather, biological predispositions such as neurological abnormalities, inherited personality traits, and hormonal imbalances can increase an individual's vulnerability to aggressive or antisocial behavior. These biological factors are significantly influenced by environmental conditions, particularly parenting and early childhood experiences. Humans learn behaviors through observation, imitation, and reinforcement—often described by the phrase "monkey see, monkey do"—especially during early childhood between the ages of zero and three, a critical period for brain development. During this stage, parenting plays a vital role in shaping emotional responses, social behavior, and moral understanding. Exposure to abusive, neglectful, or inconsistent parenting can impair emotional regulation, empathy, and impulse control, while also affecting physical brain development and stress responses. In extreme cases, such as some serial killers, the combination of biological vulnerabilities and severe childhood trauma can contribute to patterns of violent behavior. However, these same learning mechanisms operate in all individuals, influencing mental health, social relationships,

and behavior throughout life. This demonstrates that human behavior emerges through the interaction of nature and nurture rather than a single determining factor.

### **The Power of Mindset: Is Your Glass Half Full? Or Half Empty?**

Alyssa Garcia, College of the Mainland | Advisor: Dalel Serda

Our mindset is a powerful force that shapes how we view ourselves, others, and the world around us. Campbell et al. states, “Researchers in the field of explanatory styles have shown that the mindsets we adopt can determine the course of our lives, starting at a very young age.” Choosing between a growth mindset and a fixed mindset can significantly affect personal growth, relationships, and overall success. Campbell et al. goes on: “... understanding and adjusting mindsets can change how a person approaches and understands life... A fixed mindset often focuses on obstacles, self-doubt, and fear of failure.” When individuals adopt this outlook, they may feel stuck, discouraged, or unwilling to take risks. Moreover, Richerson explains, “[a] fixed mindset cultivates helplessness and pessimism.” This way of thinking can limit potential and create a cycle of pessimism that impacts both mental and emotional well-being. On the other hand, Richerson states “...having a growth mindset encourages resilience, adaptability, and hope.” A growth mindset does not deny the existence of hardships but instead emphasizes learning from setbacks and viewing challenges as opportunities for growth. This research will explore and map out the literature on fixed and growth mindsets and their effects on our day-to-day lives. Consciously shifting our mindset and how we interpret and respond to life experiences, helps recode our way of being in the world. It empowers us to grow, succeed, and thrive despite life’s challenges.

### **The Perceived Impact of Personality on the Academic Careers of Gifted Students**

Deepika Miryala, Clear Falls High School | Advisor: Alexis Allen

Personality plays an important role in how humans learn, work, and think. In academic settings, personality influences students’ study methods, motivation, organization skills, etc. In this study, 10 gifted and talented (GT) high school sophomores from League City, Texas were asked to complete the NERIS Type Explorer personality test on the 16Personalities website. They were then interviewed about how they felt about each of their 5 assigned personality traits and overall character description influenced their academic careers. Interview questions covered student perceptions about the accuracy of the results, their academic careers, the relative effect of each personality trait, etc. The responses were then analyzed to uncover the prevalence of each personality trait and patterns between those with similar character traits, and recommendations were made regarding how these findings could be translated into educational practice. By understanding how personality impacts academic careers in a niche population such as gifted high school students, we can gain a better understanding of how young people learn and how we can design more effective education systems to meet their needs.

## **10:40 – 11:40 a.m. | Session B6 ICB 227: Decoding and Recoding an “Education”**

### **Beyond the Lecture: A Student's Journey Where Experience Meets Education**

Hannah Lemmonds, College of the Mainland | Advisor: James Mubiru

Traditional lectures provide important foundational knowledge, but many students discover their most meaningful learning happens outside the classroom. This presentation reflects on how participating in hands-on research reshaped my confidence, communication skills, and sense of professional identity. Through involvement in a collaborative laboratory study, I learned practical lab techniques, improved my ability to work within a team, and built supportive relationships with professors and classmates pursuing similar career goals. These experiences helped me feel more comfortable asking questions, sharing ideas, and seeing myself as an active contributor rather than just a passive learner. Although many students face barriers such as work schedules, family responsibilities, and limited time, stepping into a research environment offers long-term benefits that extend beyond course credit.

By learning through direct experience rather than observation alone, students gain embodied knowledge that allows them to better understand their abilities and redefine how they see themselves within academic and professional spaces. This journey shows that when education becomes experiential, it encourages both personal growth and a deeper connection between knowledge, identity and self.

### **Learning Through Movement in XR**

Juan Alvarado, Houston City College – Spring Branch Northwest | Advisor: Simone Gardiner

Connecting movement to thinking is a fundamental human function we use to learn about the world around us. However, many modern educational frameworks look over how movement is our natural teacher. Developments in XR technology can show us how we can use immersive environments to stimulate understanding through movement. By analyzing how gesture patterns apply to learning principles in immersive simulations we can use this feedback to support systems that move away from screen-based learning. A framework based on the six percepts of embodied learning was used to ensure mixed reality environments were designed to encourage forming connections through interaction. The ELASTIC3S system was used to run an earthquake simulation to gather and analyze gesture data from students who participated. From this data three patterns emerged and were identified as high-frame learners, low-frame learners, and transfer learners depending on their performance in the simulation and the post-test. The results from this examination show how increasing the levels of physical engagement in the learning process is linked to better retention of knowledge. XR systems will be used to create immersive learning environments that will support diverse learners with personalized instruction.

## College: The Great Equalizer?

Amanda Cartwright, College of the Mainland | Advisor: Dalel Serda

The pursuit of education is often presented as a reliable pathway toward a better life, yet this promise rarely accounts for the complexities of identity, culture, and the lived experiences of marginalized communities. This project investigates why the narrative of education as an automatic equalizer persists, and how the stories students learn about themselves, their histories, and their future, shape their long-term academic choices. Drawing from scholarly research on literacy, community testimonios, and primary data gathered through surveys and interviews with residents of Galveston County, this study reveals that the core challenge is not access to schooling, but access to meaningful representation within educational environments. Participants across age groups expressed a need to see their cultures honored, their histories accurately told, and their identities framed as valuable within the curriculum. Data shows that when students encounter inclusive pedagogy and identity-affirming instruction, they experience stronger motivation, deeper belonging, and a clearer sense of educational possibility. These findings underscore the importance of teaching practices that prioritize curiosity, cultural understanding, and self-recognition rather than conformity to inherited norms. Ultimately, this research argues that educational spaces must evolve to cultivate pride, agency, and awareness among all students, empowering them to see themselves as deserving of knowledge, opportunity, and a future shaped on their own terms.

## The Ancient Roots of Modern American Education

Alexa Kiefer-Rodriguez, College of the Mainland | Advisor: Stacey Bureson

This honors project explores how modern American education is influenced by educational systems developed in ancient civilizations. Many people view today's school systems as a product of democracy or the Industrial Revolution. However, this project argues that the foundations of modern schooling were established much earlier in societies such as ancient Egypt, China, India, Greece, and Rome. In these civilizations, education was not merely about transmitting academic knowledge. Instead, it was designed to shape moral character and civic responsibility alongside intellectual development.

Along with the research paper, this project includes a high school lesson plan that connects ancient educational practices to students' experiences in modern classrooms. Through a PowerPoint presentation, discussion, comparison charts, and reflective activities, students will learn who was educated in the civilizations, what was taught, and why education mattered in each society. The lesson encourages students to recognize how values such as discipline, citizenship, and structured learning continue to appear in schools today. Overall, this project demonstrates that education has never been solely about acquiring academic knowledge, but about shaping individuals in ways that allow society to flourish. Understanding these historical roots can help explain the current and future goals of education in modern America.

## 10:40 – 11:40 a.m. | Session B7 ICB 228: Embodying Trauma

### The Truth in the Trauma

Coralyn Shirey, College of the Mainland | Independent Scholar

Rape culture is not just about sexual violence; it's about power, control, and who is believed. It decides whose bodies are trusted and whose knowledge is ignored. In rape culture, women's embodied knowledge, fear, pain, memory, instinct, and trauma are often dismissed unless it fits neat and "acceptable" stories. This presentation argues that rape culture works as a system of knowledge control, one that values institutional voices over women's experience and treats the body as unreliable rather than truthful.

Women's bodies are living archives. They hold memories when words fail. Trauma responses like freezing, dissociation, and fragmented memory are not weaknesses, they're intelligent survival responses. Yet rape culture rewrites these responses as guilt, confusion, or lies. Through the process of decoding, this work examines how women are taught to distrust their bodies and blame themselves for harm done to them. The work of recoding explores how survivors reclaim power by naming their embodied experiences as real knowledge. By centering the body as a source of truth, this presentation challenges dominant ideas about knowledge, credibility, and power. By using psychology, statistics, and cases, I will show that believing embodied knowledge is not just healing, it's necessary to dismantle rape culture itself.

### How the Trail of Tears Embodied the Difference of Change

Rachel Currie, Lee College | Advisor: Brianne Dayley

This presentation is an examination of artifacts related to the 1831 forced displacement we call the "Trail of Tears" through the Symposium theme, "Embodied Knowledge: Decoding and Recoding the Self." In this project, I analyze three historical artifacts: a map of the route removal, a historical marker listing the death toll, and a contemporary presentation arguing Indigenous bodies functioned as living archives of forced displacement. The first artifact, the map, is decoding federal policy in geography from the time of the Trail of Tears, however, the bodies of Cherokee men, women, and children reveal the true costs of removal. The second artifact, a memorial marker, quantifies death, yet is representing the embodied suffering, hunger, exhaustion, disease, exposure, and trauma that Indigenous people went through. The third artifact describes these experiences and further illustrates how removal was not merely territorial relocation but an attempt to recode Indigenous identity through forced migration and cultural disruption. The examination of these artifacts represents both physical displacement and a struggle over identity, survival, and the right to self-definition during the Trail of Tears.

### The Weight of the Past: Factors Impacting the Disclosure of Trauma

Marly Rundell, College of the Mainland | Advisor: Dalel Serda

Intergenerational trauma influences family relationships, specifically parent-child communication. The transmission of trauma from parent to child is associated with mental health, peer influence, resilience, and parental involvement. Uriel

Last argues that experiences parents had with past trauma can greatly influence their children. Sims-Schouten indicated that trauma could create different outcomes for different children; resilience for some, vulnerability for others. Prager's research shows a potential way out of negative outcomes by showing that when trauma is broadly recognized by the community, children may experience less of its negative effects.

This project asks: how do parents decide whether to share their past hardships with children? My exploratory research investigates factors that influence whether parents choose to share trauma with their children. I have collected results from a questionnaire and will conduct an interview with a parent who experienced past trauma and has made intentional decisions about how to lessen her trauma's effect on her children. My current results indicate that parents' decisions are shaped by the child's age, maturity, emotional status, and perceived value of the potential lesson. This study highlights that the decision to communicate trauma involves complex factors.

This work connects with the theme "Embodied Knowledge: Decoding and Recoding the Self" by recognizing trauma as knowledge carried within the body. When parents decide to share trauma, they are decoding their embodied knowledge of harsh pasts and recoding their stories into resilience, awareness, and empowering relationships. Trauma disclosure can become transformative.

### **Embodied Difference and The Limits of Inclusion in *Hidden Figures***

Naomi Rivera, Lee College | Advisor: Brianne Dayley

This presentation examines *Hidden Figures* through Audre Lorde's "Age, Race, Class, and Sex: Women Redefining Difference" to explore how Katherine Johnson's body functions as an archive of institutional exclusion. Focusing on the bathroom scene, the analysis shows how her repeated physical movement across NASA's segregated campus encodes knowledge that policies of "inclusion" cannot conceal. Drawing on historical context and Lorde's framework, the presentation argues that Black women's labor is valued while their embodied experiences of race and gender are ignored, almost completely throwing Black labor to the side. Johnson's body reveals the contradiction between symbolic inclusion and structural inequality, demonstrating that inclusion without transformation is not liberation but pure decoration. By foregrounding the body as archive, the project reframes resistance as lived motion, revealing how everyday navigation exposes power, policy failure, and possibilities for transformation. The presentation concludes that centering embodied difference as a source of knowledge and power is essential for genuine systemic change.

## **10:40 – 11:40 a.m. | Session B8 ICB 318: Bodies in (Artful) Action**

### **The Body as Archive: Rhythm, Memory, and Resistance in Colombian Traditional Music**

Maria Montoya Vargas, College of the Mainland | Advisor: Loanny Hernandez

This presentation examines cumbia, currulao, and bullerengue as embodied archives and living systems of knowledge carried in rhythm, breath, and movement. These musical traditions

are rooted in Afro-Colombian and Indigenous histories and transmit generational memory through percussion, call-and-response song, and ritual dance, preserving stories of survival, displacement, and resistance beyond any written record.

I explore how currulao's marimba-centered music reflects African worldviews, how bullerengue's female singers preserve family and community memory through their voices, and how cumbia's flowing rhythms reshape ideas of national identity through cultural exchange. In these traditions, the body creates, carries, and protects the knowledge.

Using perspectives from ethnomusicology, performance studies, and Afro-diasporic theory, this presentation examines music as both sound and live practice, treating the body as a central source of knowledge. By understanding rhythm as a carrier of history and movement as a form of political expression, this presentation argues that embodied practice challenges colonial narratives and reshapes collective identity. These musical traditions reveal that knowledge lives in gesture, sound, and shared experience, and that the body, often overlooked in academic spaces, remains one of our most powerful sources of truth, memory, and expression.

### **The Sport, Long Forgotten, Helping America**

Memphis Riehl, College of the Mainland | Advisor: Bernie Smiley

Bowling, a sport that has been around for many years, a sport not so well known as it used to be, a sport that many don't even classify bowling as a sport anymore. There is an abundance of information that goes into bowling, including history. The farthest back historians have recorded bowling being found is all the way back in 3200 BC, science and physics affect how a ball hooks its strength, how pins fall, and community aspects like league and friendly fun. All this affects the game today. Bowling used to be a prized sport in history; everyone watched and liked bowling. Now it's being declassified as a sport. Science and physics play a role in this amazing sport, and most young people say that bowling is an easy sport, and any regular person can go up in the lanes and be able to score well. This sport brings people together and builds community. This presentation will show that bowling is more than an easy sport. The presentation will have wall drawings and art from the Egyptians, showing that bowling has been around longer than many think. There will be evidence from physicists and WPBA Hall of Famers, and it will also show examples of how this sport brings the community together.

### **Embodied Vision: Photography and Graffiti as Practices of Knowing**

Jesse Gomez, Houston City College – Eastside | Advisor: Toni Holland

Photography and Graffiti are both creative practices that transform embodied experiences into intentional expression. These creative practices offer different yet complementary perspectives on how individuals decode and recode oneself. In photography, an individual needs to learn how to frame a moment or a landscape which needs coordination of perception with all possible factors kept in mind such as physical movement, internalized visual logic. Photographers develop muscle memory through repeated usage of light, composition, and timing, revealing how knowledge becomes much as an extension of one's body as much as intellectual. Similarly, graffiti practice requires embodied control of hand gestures, spatial

awareness, and adaptive response; graffiti disciplines the hand, eye, and environment which shapes the artist's identity through iterative physical engagement. Both forms show how creative practices transcend rote cognition: each embeds movement, sensation, and context. This project aims to examine the embodied knowledge inherent in photographic and graffiti, exploring how visual arts can train perception and physical fluency, ultimately reflecting how the self is understood and expressed in lived experience.

### **Inside the Texas Marine Mammal Stranding Network: A Student Perspective**

Brynna Malley, Galveston College | Independent Scholar

The Texas Marine Mammal Stranding Network (TMMSN) plays a vital role in monitoring the health and populations of marine mammals along the Texas coastline. By documenting stranded individuals, responding to live and deceased animals, and collecting biological samples, the network provides critical data for conservation, disease monitoring, and ecological research. Understanding the causes of strandings also informs strategies to mitigate human impacts such as boat strikes, pollution, and habitat degradation. During my internship, dolphin teeth were extracted and cleaned for Growth Layer Group (GLG) analysis, a key method for age estimation and life history reconstruction. This project focused on refining the processing and archival preparation of teeth by transitioning from traditional freezer storage to a dry-storage protocol. Dry storage improves long-term preservation by preventing cellular degradation from freeze-thaw cycles, reducing the risk of cracking or “freezer burn,” and providing a stable substrate for acid-etching and staining procedures. By optimizing these storage techniques, the TMMSN ensures skeletal records remain viable for decades, supporting long-term studies of population demographics and the impacts of environmental stressors in the Gulf of Mexico.

### **10:40 a.m. – 11:40 p.m. | Session B9 ICB 319: COM's Creative Writing Club | NONJURIED SESSION**

Advisor/Moderator: Courtney Pugh and Lisa Frase

Students Featured: Brianna King, Vincent Ybarra, Mykenzie Gorom, Aaron Cobb, Christian Sinicrope

Creative writing is an artistic endeavor where authors provide an immersive experience for readers to explore uniquely human experiences within the natural world. Through words on the written page, we learn to appreciate living in balance and harmony with nature. The emphasis in creative writing is on the narrative tradition and poetics, character development, and language awareness, as well as celebrating the written word's power to move, reflect, and interpret reality. Personal experiences and observations blend into factual narratives in creative nonfiction, and some writers experiment with the way these genres intersect. The writers in the session, students in the COM Creative Writing Club and current Introduction to Creative Writing class will share short, original pieces of poetry, fiction, and nonfiction. This session is advisor moderated.

### **10:40 a.m. – 11:40 p.m. | University of Houston- Clear Lake's GRADUATE Student Research Showcase | NONJURIED SESSION**

Advisor/Moderator: Giazú Enciso Domínguez, Assistant Professor  
Psychology Department

Students Featured: Precis 'Damian' Clarke, Katherine Smith, and Jacey Keys

#### **Beyond Reductionism: Complex Identities and Emotional Negotiation in Military Women, Adolescent Sexuality, and Mixed-Race Individuals**

Brynna Malley, Galveston College | Independent Scholar

This panel will discuss the affective/emotional experiences of three populations Putting in discussion shame in SexEd, the emotional weight of divorce for women in the military, and the internal tensions of mixed-race identity all involve intense affective processes.

#### **Decoding Experiences of Active Military Women in Their Divorce**

Precis 'Damian' Clarke, UHCL graduate student

This study expands upon earlier research which has showcased that the rates of divorce within the female United States military members is significantly higher when compared to their male counterparts within the military (Kanzler et al., 2011). With rates of divorce being twice as high between female military members and male military members (Karney & Crown, 2007). The lack of research in this specific area leaves gaps in divorce discourse which can erase the experiences of women within the military and creates gendered institutional stressors that make it less likely for female active duty and veterans to receive support. The prime purpose of this study is to investigate the experiences which female active members of the United States military have with divorce regardless of sexual orientation or race.

#### **De/coding Shame: Emotional Negotiation – Affective Barriers in Adolescents' Engagement with Sex Education**

Katherine Smith, UHCL graduate student

This project examines how adolescents experience shame when engaging in conversations about Sex Education. Current discussions around Sex Education often reflect a reductive understanding of the topic, limiting it either to biological processes or to sexual intercourse. This narrow framework contributes to persistent discomfort among young people. By reviewing the historical trajectory that has shaped Sex Education in the United States—particularly the varied approaches seen across states such as Texas—this study highlights how inconsistent school curricula and legal frameworks influence adolescents' willingness to participate in open discussions. The comparison with practices in other countries will further emphasize the tension between what is taught and what adolescents need.

#### **Exploring the Complexities of Multiracial Identity: Beyond Coding, Navigating and Negotiating Race**

Jacey Keys, UHCL graduate student

Previous research has focused on either exploring the beneficial aspects or detriments of being multiracial, leaving a gap in the literature regarding holistic explorations. The purpose of this research study was to comprehensively explore the complexities

of multiracial identity, employing a qualitative approach. Participants included multiracial individuals who were half Black and half White. In the United States, Black and White are the most common polarizing races due to the significant historical and societal relevance. The participants engaged in semi-structured interview sessions and were guided to participate in a visual narrative inquiry process.

## 11:50 a.m. – 12:50 p.m. | Session C1 ICB 201: Embodied Knowledge

### Nosocomial Infections as Embodied Knowledge

Martin Arguello, Clinton Orisakwe, Ava Hardin, College of the Mainland | Advisor: Rachel Fano

Healthcare associated infections are commonly understood through laboratory data, diagnostic criteria, and institutional reporting systems. However, these approaches often overlook how infection is first experienced and carried within the body itself. This project examines healthcare associated infections through the lens of embodied knowledge, arguing that the body functions as a site where infection, immunity, and resistance are encoded and expressed before they are consciously recognized or formally named. Colonization, immune response, and antibiotic resistance demonstrate how the body holds biological knowledge that exists outside traditional linguistic and analytical frameworks. By exploring how patients may carry infections without symptoms and how the immune system responds prior to diagnosis, this presentation highlights the body's capacity to know independently of the mind.

We will explore the literature on healthcare associated infections, immune response, and antibiotic resistance to describe how embodied biological processes precede formal diagnosis and to determine how these processes challenge traditional institutional definitions of knowledge. Understanding healthcare associated infections as embodied experience challenges purely institutional definitions of knowledge and encourages a broader consideration of how knowledge is recognized and interpreted within healthcare settings.

### Neurobiological Consequences of Sustained Stress

Kayla Chitic, Houston City College – Central | Advisor: Nicolas Rangel

Over time, stress can significantly affect multiple areas of an individual's life, including thought processes, behavior, eating habits, productivity, and overall well-being. While stress is often perceived as temporary, research suggests that sustained stress can have a lasting effect on mental and emotional functioning. Young adults face various stressors, such as psychological, episodic acute, chronic, and internal stressors, making this group particularly vulnerable. This research explores how sustained stress influences mental and emotional functioning in young adults. Using qualitative methods, the project examines case studies and existing neuroscientific and psychological studies on extended stress exposure and its effects. Current research shows that long-term stress can interfere with the brain system responsible for emotional control and thinking skills by weakening connectivity in key regions. Although some effects are reversible, prolonged exposure can cause lasting impacts. This project argues that stress should not be overlooked, as its

neurobiological consequences can significantly shape behavior and emotional stability. These results connect to discussions about mental health awareness and highlight the importance of getting support during a critical transitional stage in life.

### Consequences of Genetic Modification of Human Embryos

Katelyn Clark, College of Mainland | Advisor: Gwendolynn Barbee-Yow

The evolution of CRISPR-Cas9 genome editing has transformed DNA from a fixed inheritance into an editable biological code, reformulating the human body as both design and data. This paper argues that editing human embryos is scientifically premature and ethically indefensible because it attempts to rewrite the embodied self despite unresolved risks and uncertainties. Drawing on empirical studies in genetics and bioethics, the analysis examines four major dangers: off-target mutations, mosaicism, permanent heritable alterations, and unpredictable long-term genomic damage. Evidence from laboratory research demonstrates that even under controlled conditions, CRISPR can produce unintended mutations, chromosomal abnormalities, and complex structural rearrangements that may affect not only individuals but also future generations. This paper contends that germline editing represents a profound act of biological authorship, raising questions about consent, identity, and who has the authority to define which traits should be preserved or altered. Ultimately, the project asserts that the ability to modify genetic code does not yet justify its use, and that restraint is necessary until safety, reliability, and ethical consensus can be ensured.

### Archive, All of Us and AI in Alzheimer's Disease

Kevin Molina and Jiya Desai, University of Houston – Downtown | Advisor: Xyanthine Parillon

Genomics and Proteomics underscore encoding and recoding the genome. Genes encode translated proteins. Genomic anomalies are associated with conditions. Proteomic reconstructions can unveil features for targeted therapy. Alzheimer's is a neurodegenerative and neuroinflammatory condition affecting 7.2 million people in the United States. The All of Us Platform, that embodies knowledge in a free data browser archiving genomic and population content, provides a deeper understanding for conditions affecting US populations. We found that single nucleotide polymorphisms (SNPs) are associated with the gene PSEN1 in Alzheimer's. A workflow is described in how the All of Us Platform is used to determine insight into genomic encoding for this condition. SWISS-MODEL was used to construct a 3D proteomic model of PSEN1 to recode features for targeted therapy. AI was used to determine therapies targeted for PSEN1. Targeted therapies affecting molecular aspects of the protein are described. Together the encoding and recoding of PSEN1 in Alzheimer's provides evidence for a targeted therapy for personalized medicine.

## 11:50 a.m. – 12:50 p.m. | Session C2 ICB 203: Humanity's Hands on the Environment

### The Anatomy of Life: Experiences

Kendra Salmeron, Houston City College – Eastside | Advisor: Toni Holland

This presentation will focus on psychological and neurological

perspectives to describe how our identity and behaviors are developed through experiences to accomplish a meaningful and balanced life. Some adults in society believe that a higher education can help improve their view and experience in humanity. Given that all experiences can be educational, and not all have to come from a classroom, we learn through our decisions to be knowledgeable. However, personal wealth can also be associated with the way we learn to behave towards people, with an intuitive reaction and automatic learning opportunity. Therefore, the way experiences can shape individuals is by influencing the ability to regulate and control what happens around them. We can analyze this by contrasting how indigenous people transformed the Amazon forest into a home, despite the dangers, with how the different modern American society of millennials and Gen Z generations interact with and try to stay in control of their surroundings. This helps to identify how understanding environments means understanding the building blocks of oneself. An obvious truth of life is that one cannot live by avoiding the world.

### **Cars, Zoning, Community: The Failure of U.S. Car Dependency**

Jimmy R. Davis IV, Lee College | Advisor: Brianna Dayley

Nationwide road infrastructure has normalized car dependency as a symbol of freedom, yet this system quietly encodes confinement in everyday life. Communities across the United States are designed around vehicles rather than around human bodies, resulting in separation, isolation, and limited modes of interaction. Through the concept of induced demand, this presentation argues that highway expansion does not alleviate congestion but instead reinforces a cycle of car dependency, spatial fragmentation, and social disconnection.

In this presentation, I use Houston, Texas, as a case study. I examine how single-use zoning and highway expansion shape mobility and community structure. In contrast, a comparative analysis of Seoul, South Korea, where the removal of major highways revitalized public space. Demonstrating how infrastructure can be recoded to prioritize people over cars. By decoding the dominant narrative that symbolizes cars with freedom, this presentation reframes car dependency as a system of embodied confinement. Mixed-use zoning emerges not only as an urban planning strategy but rather as a method of recoding community life, restoring walkability, accessibility, and human connection. Ultimately, this project explores how built environments produce embodied knowledge and how redesigning space can transform how we move, relate to others, and understand ourselves within a given community.

### **Evaluating the Role of 3D Printing in Modern Construction**

Tina Diep, Houston City College – Northwest | Advisor: Simone Gardiner

Whenever people hear the word “3D printing,” they mostly think of the small-scale plastic projects that are being drafted on computers and printed out in 3D. However, 3D printing goes further than just that. 3D printing has been used in some industries, such as the medical field, where it is used to create customized dental implants; in aerospace, to create engine prototypes; and in automotive, to make car parts. This technology nowadays is more developed, and its applications are also being taken advantage of more, and one of the best fields to implement its use is construction, where 3D printing can help build houses

and bridges by building structures layer by layer using concrete or other construction materials. Compared to traditional methods, 3D printing helps with material waste, shortens building time, and is more reliable. The purpose of this research is to evaluate the use of 3D printing in construction, where benefits, challenges, and some noticeable projects will be examined, and whether this solution should be widely used in Houston specifically and globally in general in the future. This research aims to review projects in and outside the US, and I will also search for artifact libraries and articles included with data and statistics. The expected outcome is to determine whether 3D printing is appropriate for some current construction problems, such as labor shortages and environmental material waste.

### **An NLP Framework for Measuring Divergence Between ESG Disclosures and Performance**

Phu Vo, MunifKhan Khokhar, Chhengly Kaing, Houston City College – Northwest | Advisor: Simone Gardiner

As global sustainable finance expands toward a projected \$125 trillion by 2012, a persistent information asymmetry has emerged between firms’ sustainability narratives (“Talk”) and their realized environmental, social, and governance (ESG) performance (“Walk”). This divergence, commonly referred to as *greenwashing*, undermines capital allocation efficiency and contributes to a “Market for Lemons,” in which investors struggle to distinguish genuinely sustainable firms from strategic imitators. This study introduces the Greenwashing Index (GWI), an automated and scalable metric that quantifies the semantic divergence between corporate sustainability rhetoric and externally assessed ESG performance. We employ a dual-stream empirical framework. The “Talk” component is measured using FinBERT, a domain-specific transformer model applied to sustainability-related language extracted from legally binding SEC Form 10-K filings. Focusing on regulatory disclosures rather than voluntary sustainability reports provides a stricter test of greenwashing under heightened legal liability. The “Walk” component is constructed from third-party ESG performance measures sourced from PitchBook and S&P Global, integrating complementary risk-based and performance-based perspectives to mitigate ESG rating divergence. The Greenwashing Index is defined as the normalized surplus of rhetorical optimism over externally assessed ESG performance, allowing for the identification of greenwashing. We hypothesize that firms in environmentally sensitive industries exhibit systematically higher GWI values, consistent with Legitimacy Theory and strategic disclosure incentives. Overall, the framework conceptualizes greenwashing as a persistent narrative or performance misalignment rather than a contemporaneous reporting artifact, offering a practical tool for investors, researchers, and regulators to audit corporate sustainability claims at scale.

### **11:50 a.m. – 12:50 p.m. | Session C3 ICB 204: Encoding Oppressive Cultural Norms**

#### **Culture and Identity in Workplace**

Emmanuel Aragon and Ahmed Alnouseiri, Houston City College – Central | Advisor: Nicolas Rangel

Our presentation will talk about corporate culture and identity

using the theme “embodied knowledge: decoding and recoding the self.” Our main idea is that companies do more than just give people jobs. They shape how employees dress, speak, act, and even think. When someone starts a new job, they must first “decode” or understand the rules and expectations of that workplace. This includes dress codes, communication styles, and how workers are expected to behave. Over time, employees begin to “recode” themselves by changing their habits and behavior to fit into the company culture. For example, dress codes affect how workers present themselves. A person maybe dresses differently at work than they do at home. Communication styles also change. Some companies expect formal speech, while others allow a more relaxed tone. Workplace behavior expectations, such as being on time, showing confidence, or staying professional, also shape how employees act every day. These changes are not just mental. They are shown through body language, tone of voice, and daily routines. In our presentation, we will first explain what corporate culture means and connect it to embodied knowledge. Then we will focus on dress codes, communication, and behavior expectations. We will use real examples to show how companies influence identity. We will discuss whether this change is helpful for success or if it can limit personal identity.

### **“They’re Not Giving You a Hard Time, They’re Having a Hard Time,” Compassion with Autistic Youth**

Kylie Ramirez, University of Houston – Downtown | Advisor: Dean Kostantaras

Students with autism are often understood primarily through their behavior, which can lead to responses that focus on control rather than understanding. This presentation argues that when a child is “giving” adults a hard time, they are more often having a hard time. Drawing from professional experience as a Registered Behavior Technician (RBT) and supporting research in special education and psychology, the presentation shows how reframing behavior as communication leads to more effective and compassionate support. The project examines challenges faced by autistic youth, including sensory overload, emotional regulation difficulties, and unmet support needs in school environments. Evidence from field experience highlights how adult responses can either hinder or enhance learning and emotional well-being. The presentation emphasizes strategies that prioritize empathy, relationship-building, and student-centered approaches rather than compliance-based methods. This project links directly to the symposium theme by addressing how educators and support staff respond to challenges and differences. By fostering understanding, inclusion, and resilience, it illustrates the broader social and academic impact of supporting youth with autism in ways that promote equity, trust and long-term success.

### **Knowledge is Power?**

Saifullah Saqib, Houston City College – Eastside | Advisor: Toni Holland

“Knowledge is power,” a quote by Sir Francis Bacon, has for long influenced how we understand learning and success. However, in today’s technologically advanced world, this idea needs reconsideration. This presentation argues that knowledge is not automatically powerful; instead, knowledge is dependently powerful, becoming meaningful only when combined with responsibility, resources, passion, and effective decision-making.

While technology has made access to information easier than ever, possessing knowledge alone does not guarantee action or impact. Human responses in high-pressure situations show that knowledge without embodied awareness or emotional control can fail. The example of Stephen Hawking demonstrates that even extraordinary knowledge relies on collaborative support and practical resources to be applied. Furthermore, leadership in society often highlights that knowledge alone is insufficient. If it was enough, experts such as PhD holders would always be leaders. Instead, individuals with strong decision-making and leadership skills guide action, while experts provide knowledge and advice. This presentation explores how humans decode knowledge through learning and recode it by redefining its value in a digital age where information is abundant through Artificial Intelligence. My presentation proposes that knowledge becomes true power only when combined with ethical responsibility, practical resources, passion, and human judgment.

### **From Silence to Sovereignty: Intersectionality and Resistance in Mrs. Chatterjee vs. Norway**

Shakuntala Bhowmick, Lee College | Advisor: Brianne Dayley

In this presentation, I will explore Ashima Chibber’s *Mrs. Chatterjee vs. Norway* (2023) through Audre Lorde’s “Age, Class, and Sex: Women Redefining Difference” alongside works by Kimberlé Crenshaw and Jhumpa Lahiri. The film follows Debika Chatterjee, a Bengali Indian immigrant mother, as she battles Norway’s child welfare system to reclaim her children, who were taken from her custody based on cultural misunderstandings and prejudice. Analyzing the film reveals how Debika navigates her identity as an immigrant woman while confronting systemic oppressions related to race, class, nationality, and motherhood. Her journey of going from a subservient wife confined by traditional gender roles to an independent woman who reclaims her life and her children’s futures further highlights this. Lorde’s “mythical norm” shows how Debika exists outside Western ideals of proper parenting and domesticity, exposing the consequences of cultural erasure embedded within systems. Her struggle against Norwegian authorities, marked by cultural imperialism and gendered assumptions about maternal capability, exemplifies broader injustices faced by immigrant communities. By challenging this authoritative norm, the film reimagines societal structures, and, ultimately, *Mrs. Chatterjee vs. Norway* presents a powerful narrative of maternal resistance, offering critical insights into how immigrant women of color resist and reshape dominant institutional structures.

### **11:50 a.m. – 12:50 p.m. | Session C4 ICB 206: Cultural/Textual Analysis**

#### **The Taste of Transformation**

Emily Suarez, Houston City College | Advisor: Toni Holland

Through my research, I aim to explore how *Hannibal* (2013) presents the idea that the body can know things before the mind fully understands them. Rather than presenting knowledge as purely logical, the series shows how the truth is revealed through instinct, desire, and emotion. In this way, the body becomes a kind of archive, holding experiences and identities that are difficult to verbalize. Will Graham’s empathy works as

a bodily response that happens before conscious thought, while Hannibal Lecter views identity as something that can be shaped and transformed. Cannibalism functions as a metaphor for how “consuming” is to take something in, to understand it deeply, and to be changed by it. This idea relates to the queer experience of self-discovery, where identity is felt long before it is named or accepted. Hannibal values what the body knows over rigid ideas of right, wrong, and truth, suggesting that transformation can change how a person understands who they are.

### Quiet Queerness

Jady Bell, Lee College | Advisor: Georgeann Ward, Javier Ramirez and Brianne Dayley

In Audre Lorde’s piece, “Age, Race, Class, and Sex: Women Redefining Difference,” Lorde defines the concept of “surplus” groups in societies. “Surplus” people are anyone outside the “mythical norm” of being white, male, able-bodied, Christian, heterosexual, cisgender, and upperclass. In my presentation, I use Lorde’s piece as a “lens” to analyze Aurora Guerrero’s film *Mosquita Y Mari* (2012), focusing on how the two girl protagonists embody their queerness through a silent language constructed of gestures and proximity. They use body language and code when their spoken knowledge fails to capture their relationship. This quiet embodiment of queerness demonstrates how the oppressed create their own spaces and reject social norms. Body language and codes protect queerness for those in societies that demoralize and devalue queer identity. In a broader sense, my presentation explores how oppressed groups reject prescribed language and labels given to them and portray their own stories, create their own spaces, and embody knowledge unacknowledged by most of society.

### LUX: Rosalía’s Cultural and Industrial Impact on the New Musical Era

Beatriz Isabella Martin Hernandez, Houston City College – Central | Advisor: Nicolas Rangel

The release of LUX consolidates Rosalía not only as a musical artist, but also as a cultural and strategic phenomenon within the global industry. This album represents an artistic evolution that combines sonic innovation, visual aesthetics, and conceptual narrative, creating an experience that transcends music. From a cultural perspective, LUX sparks debate about identity, spirituality, and modernity, while reinforcing the presence of Spanish in the international market. At the industry level, the project stands out for its impact on digital platforms, streaming records, and a marketing strategy based on storytelling, personal brand building, and the strategic use of social media. In addition, the album demonstrates how current releases function as comprehensive products that include fashion, image, collaborations, and live experiences. Overall, LUX shows how Rosalía is redefining the traditional model of the music industry, positioning herself as a global brand that fuses art, culture, and commercial strategy in the digital age.

### Representations of Disability in Franz Kafka’s *The Metamorphosis* and Osama Dazai’s *No Longer Human*: The Role of Literature in Creating Empathy

Alex Mendoza, University of Houston – Downtown | Advisor: Dean Kostantaras

The question of whether who makes a body makes me wonder about the methods in which we tend to categorize people with physical and mental disabilities and how we view disabled people as individuals who cannot contribute to society as much as able-bodied people. Creating parallels between works of literature such as Osamu Dazai’s *No Longer Human* and Franz Kafka’s *The Metamorphosis* helps audiences create empathy through storytelling. The alienation Gregor feels through a change in his physicality and the severe depression Oba experiences through torturing himself with the thought that he does not behave how the rest of society expects him to are relevant to the way we historically have and currently tend to designate which bodies are worth more, whether through their ability to contribute to a working society or being a presentable enough person for a family with status, wealth and involvement in politics. By combining research including lived experiences from disabled people and literary analysis, we can see that literature can be a gateway for creating less societal stigma and understand there are systems in place that determine which bodies and minds are worthier than others.

## 11:50 a.m. – 12:50 p.m. | Session C5 ICB 221: History + Today

### The British Victorian Era: Food Recreation

Angelica Black, College of the Mainland | Advisor: Courtney Pugh

The food we cook today here in America is not only different than what we used to cook in the past but also differs from what is cooked in other parts of the world, especially in different eras. Through researching Britain’s Victorian Era, I was able to choose a couple of its more traditional and common foods to recreate. I took the original recipes and recreated them by following the recipes very precisely. There were some things that would be in the recipe that I would have to look up to see what they were or if they were called something different here. Knowledge and understanding were key in this quest to conquer Victorian food, as it did present a challenge.

### The Minds Behind the Civil War of Skyrim

John Kain, College of the Mainland | Advisor: Stacey Burleson

I will be presenting a webpage containing a PowerPoint presentation that breaks down the core nature and philosophies of the main two opposing government leaders in the video game *The Elder Scrolls V: Skyrim*. The two leaders are Ulfric Stormcloak Jarl of Windhelm and General Tullius leader of the Imperial Legion. I will compare the philosophies of these two leaders to many popular philosophers such as Niccolò Machiavelli, Sun Tzu, Thomas Hobbes, etc. I will also create direct comparisons to similar realworld events such as The American Revolution, The Mexican Revolution, and post WWI Germany. The presentation will elaborate on how the core values of these characters play into the greater conflict going on in *Skyrim*. It will also go over how other leaders such as Jarl Balgruuf the Greater of Whiterun and factions such as the Thalmor play into this conflict and how they impact the actions and values of both Ulfric Stormcloak and General Tullius. Lastly, this presentation will establish how the player character the Dragonborn impacts the actions taken throughout the civil war

and ultimately is the deciding factor on who becomes the victor of the gruesome conflict.

### **Who Gets to Rewrite You?**

Steven Salas and Gabby Maya, College of the Mainland and Dickinson High School | Advisor: Independent Scholars

Advances in neuroscience have made it possible to intervene directly in the brain to treat severe neurological and psychiatric conditions. While these procedures are often framed as medical breakthroughs, they also raise deeper questions about identity, autonomy, and what it means to be a self. This presentation explores how neurosurgical interventions function not only as treatments, but as acts of decoding and recoding embodied knowledge.

Through historical and contemporary case studies, including lobotomy, deep brain stimulation, and corpus callosotomy, this project examines how altering neural pathways can reshape behavior, emotion, and perception. In split-brain patients, for example, the body may respond or “know” in ways that the speaking mind cannot articulate, challenging the assumption of a singular, unified self. These cases reveal the brain as an archive of lived experience and suggest that medical knowledge does not merely restore function but may also edit identity. Framed within the theme Embodied Knowledge: Decoding and Recoding the Self, this presentation asks who holds the authority to define normalcy, determine when intervention is justified, and set the ethical limits of altering the brain. By sitting in neuroscience within a broader ethical conversation, this project invites us to consider how responsibility, consent, and humility must guide those who hold the power to rewrite the human self.

### **Socialist Cosmonauts and Robots: The Influence of Communism in Soviet Children's Science Fiction Books**

Olivia Brooks, Lone Star College-CyFair | Advisor: Aurora Lugo

With an aim to determine the ways communism influenced Soviet children's science fiction books from the 1960s and 1970s, this study compares a sample of books to the education reforms implemented to introduce children to communism. Research has shown the connection between communism and adult Russian science fiction, while research on children's science fiction has been limited. Five Soviet children's science fiction books, with authors such as Anatoli Mityayev and Yevgeny Veltistov, and the report “Content and Methods of Communist Upbringing in the Schools” by A. Kairov, were used to compare the themes of children's science fiction to the communist values taught to children in schools. The books showed themes of getting along with others, working for the betterment of society, and looking down upon those who do not; contained a significant scientific figure; and showed inspiration from space. This is significant because it fits with the communist values specified in the report and the scientific advancement goals of the Soviet Union. This research was limited by the small number of books available. Future studies should examine a wider range of children's science fiction by different authors in relation to communist values of the 1960s and 1970s.

## **11:50 a.m. – 12:50 p.m. | Session C6 ICB 227: Exploring Identity**

### **Spectrum of Identity**

Juan Martinez, Houston City College – Eastside | Advisor: Toni Holland

What makes humans human? Is a human defined by how normal and how much they resemble the rest or maybe it is something more abstract such as how they must act befitting the societal norms. In the end, there is no true way to define a human. I am investigating this because I relate to this concept of what makes someone normal. I will be researching the concept of transgendered people and why gender norms do not define a person. My research will be based on opinions of people and myself while also including research and articles of credible sources on what defines a person. I will also be covering how society and religion have cemented the idea of a binary gender rather than the spectrum of what gender truly is. This research is very important for understanding that manmade concepts can be restrictive and creates a way of thinking that imprisons people to what the majority believe to be concrete.

### **Exploring the Impact of Colorism: Does it Affect Your Life?**

Brianna Mungin and Aurihana Mendoza | Advisor: Dalel Serda

This project explores how colorism affects everyday life and personal experiences. Colorism refers to discrimination based on skin tone, where lighter skin is often viewed as more desirable than darker skin, both within and across racial groups. This study argues that colorism is a form of unfairness that shapes self-perception, social treatment, and relationships. This exploratory study examines colorism through a survey of thirty-six individuals who identify as Black, Latino, or mixed-race. The survey focused on awareness of skin tone bias, comfort with skin tone, and experiences of differential treatment, using both structured and open-ended questions to examine patterns and perspectives.

To support the study, works by Margaret Hunter, Sarah Webb, and Wanda Brooks and her coauthors were used to contextualize colorism as a social issue. These works describe how colorism can influence mental health, identity formation, dating dynamics, and family relationships, including generational patterns within families. While some people have learned to love their skin tone over time, others still face unfair treatment today. Because colorism is often seen as normal in everyday life, it is often ignored. By treating the body as an archive, this project shows how lived experience shapes the self and reveals knowledge the body carries, calling for greater awareness and change.

### **The Impact of Discourse on our Identity**

Isabella Perez, Houston City College – Eastside | Advisor: Toni Holland

How does discourse in our communities encode our identity? Identity can be defined as characteristics determining who a person is. As a young Latinx female my identity is distinct from tradition American culture. As a child I was too Hispanic to be American, and too American to be Hispanic, I never experienced the true mainstream American culture. But how does the discourse throughout my own Latinx community shape my identity? I am particularly interested in this topic because many of the experiences I experienced as a young Latina shaped my identity (i.e., morals, values, education, jobs, etc.) My research will be based

on Latinx culture and linguistic heritage. I will also be researching the importance of never forgetting our culture because of growing ethnocentric opinions. More specifically, I want to research the importance of learning culture to advocate for our communities and the voices that cannot speak up. This is extremely important to me because preserving Latinx culture is crucial in protecting the centuries of history left behind from our ancestors. Not only is it important to me, but it is also important for others to know.

### **Women's Perceptions of Masculinity: Towards a Potential Transformation of Men**

Isabel Gonzales, University of Houston – Clear Lake |  
Advisor: Giazú Enciso Dominguez

The term “masculinity” is often perceived as one concept and for many years has been defined by men’s perspective. The definition of men varies by their cultural and geographical background; as well as social, political, and economical environments. Masculinity is a relational concept, not fixed but dependent on relationships to establish their own definition. Because academia is a patriarchal space, for many years men have produced knowledge, therefore contemporary literature lacks insight from women, critical, and gender perspectives. My project shows the lack of research from women in academia, not just in the U.S. but in different cultures. My work will explore the perceptions of masculinity and men from a women’s point of view. In a world where we are constantly hearing about men’s ideas of masculinity, one must pay attention to the women’s idea of what men are. Since gender is relational, one cannot understand or have a full complex take on masculinities without the female perspective. In addition, women, as an outsider of the male perspective can give us a critical and challenging perspective on masculinities. In this project I will be interviewing women within a wide age range and asked them about their definitions and characteristics of men. Finally, I consider that by including female perspectives on masculinity, we can also address potential transformation on the concept of masculinities therefore the future men in our society.

### **11:50 a.m. – 12:50 p.m. | Session C7 ICB 228: Embodying Adolescence (+ Beyond)**

#### **The Development of Book Genres Across Childhood, Adolescence, and Into Adulthood**

Brianna King, College of the Mainland | Advisor: Lisa Frase

Growing up, literature preferences change from baby books about naming farm animals to cheesy romance novels. As we change, our books also change due to experiences made along the way like puberty and drama in high school or junior high. The changing choices could come, as well, from childhood and what we were exposed to, and how literature or media made us feel. This project dives deep into exploring these possibilities of exposure to literature and experiences early on and how it affects what books we consume in adulthood. This project uses anonymous survey responses of what participants’ parents may have read or exposed them to and how, what books they were made to read in high school, and the straight-forward questions of why they like the genre they do now versus then, alongside secondary research. The purpose is to find a correlation or no correlation within these questions, to find a possible link to

childhood and adolescents to adulthood genre preference. This study could greatly benefit those who would like to know why they may avoid or only choose a certain genre; the realization may change how they see those books to enable them to have a new perspective to retry or to try more genres.

#### **Liberating the Internal World of Adolescents**

Mya Moore, College of the Mainland | Advisor: Independent Scholar

Parenting predictors of child well-being significantly differ for adolescents compared to younger children. During the transition to adolescence, this life stage is marked by an increase in both autonomy and reliance on parents and peers as well. However, the two aspects of parenting, parental support and control, can affect adolescent outcomes in both positive and negative ways. The psychological background of parental behavior influences the transformation of emotional regulation exhibited from childhood to adolescence through various interactions. Many research studies have been conducted based on family interactions and parents with histories of child neglect and/or trauma to evaluate the influence on developmental outcomes. It has been proven that if an adolescent does not feel the warmth and responsiveness that a parent should display, they are more at risk of developing anxiety or depression as they mature. In alignment with the GCIC Academic Symposium theme, these findings highlight how early family dynamics encode adolescents into absorbing relational experiences as emotional patterns that ultimately shape their sense of identity and well-being. Understanding these psychological processes enables the decoding of intergenerational trauma and the potential recording of healthier emotional outcomes to liberate the internal world of adolescents.

#### **DARE to Change: Decoding America's Largest Failed Harm Reduction Program and Recoding it for the Next Generation**

Carson Cook, College of the Mainland | Advisor: Dalel Serda

Currently, the United States is amidst an epidemic like no other. This epidemic, although it has resulted in much harm and death, is not just one of the body but of mind and soul. This epidemic I am speaking of is the ever rising rates of drug addiction and overdose. This problem is not recent, having plagued the country for years, with the US not only ranking highest in overdose deaths, but remaining continuous in its high numbers while other countries are declining (Gumas, 2025). Clearly, drug addiction and overdose are a serious problem, and throughout the decades, programs have emerged to combat it. Standing out amongst all these programs as the most utilized in the United States is the DARE program (Obot Csete, 2015). However, despite its popularity, research shows that DARE is deeply flawed. Still, although it has gained notoriety as an unsuccessful harm reduction program, DARE has continued to be utilized throughout the country. The goal of this project is to deconstruct the failures and successes of the DARE program, with the goal of recoding it into something that can further our knowledge of the addiction and free ourselves from its victimization.

#### **Greed, Fame, Power: Behind the Scenes of Parental Exploitation**

Jessica Landaverde, Lone Star College – Kingwood | Advisor: Eric Skiles

The utilization of child actors in the entertainment industry has led to a toxic relationship sprouting between the actors and their parents. This research paper analyzes the relationship of parental

exploitation on child actors, with an aim to answer: “What are three fundamental causes behind parental exploitation and its long-term consequences on the child actors?” This paper dives deep into three films: *Mommie Dearest*, *Honey Boy*, and *Gypsy*, including an evaluation of former child actors’ experiences, to answer this question. In the completion of this research, it can be determined that the root of these abusive relationships involves financial gain, parents’ desire for fame and adoration, and personal ambition by living vicariously through the child. Therefore, the purpose of this paper is to combine these evaluations in these sources and spread awareness on the toxic relationship that many do not pay much attention to, leading to more regulations for the handling and protection of child actors. Future research would look at the history and rise of child performers, including the circus, film, and theater.

## 11:50 a.m. – 12:50 p.m. | Session C8 ICB 318: Decoding and Recoding Subjectivities

### From Hope to Healing: Strategies to Navigate Grief

Debra Ricket, College of the Mainland | Advisor: James Mubiru

Your heart isn’t broken because you’re weak; it’s broken because you loved and lost, and that’s what real love is. Loss is an inevitable part of human experience, yet the process of overcoming it remains deeply personal and multifaceted. Pregnancy brought feelings of livelihood, excitement, and a sense of purpose. After experiencing a miscarriage, these emotions shifted profoundly, guiding a journey through the five stages of grief. Denial emerged as disbelief and a surreal distortion of reality, creating a temporary disconnection from the loss. Anger arose as frustration toward circumstances and the seeming unfairness of life. Bargaining manifested in “what if” reflections and attempts to make sense of what could have been. Depression brought the weight of sorrow, emptiness, and longing for what was lost. Finally, acceptance allowed a gradual integration of grief, fostering renewed purpose, self-compassion, and hope for the future. This project integrates personal narrative with clinical research on mindfulness, narrative therapy, and social support, illustrating that grief is not a weakness but a reflection of love. By mapping the emotional journey to evidence-based strategies, it demonstrates that even the profound pain of miscarriage can catalyze resilience, emotional growth, and healing.

### Senses

Karla Ortiz, Houston City College | Advisor: Toni Holland

Our senses act as powerful knowledge systems, constantly gathering information that shapes how we move, work, and understand the world. Long before we consciously think, our bodies interpreted signals, sound, pressure, balance, temperature, and texture to guide our decisions. This embodied knowledge can be a tremendous advantage. It allows a mechanic to hear subtle engine problems, a baker to feel when dough is ready, and a dancer to sense a shift in balance before falling. These forms of expertise make us more efficient, intuitive, and connected to our environments. They also build confidence, because our bodies learn to “know” things that words can’t fully explain. However, relying on sensory knowledge has

limitations. Our senses can be biased or incomplete, shaped by past experiences that may not always apply to new situations. Two people can interpret the same sensation differently, leading to misunderstandings or errors. Sensory learning also takes time and repetition, which means not everyone has equal access to the same embodied skills. Still, the blending of sensory data and experience is a core part of being human. It reminds us that knowledge is not only something we think, but also something we feel, practice and carry in our bodies every day.

### Adult Education: In a Second Language

Yeny Contreras Baires, College of the Mainland | Advisor: Roger Mora

Go back to college???

Why not!

But...In a second Language?

Let me introduce myself! My name is Yeny Baires, I’ve been a student for two semesters in College of the Mainland, first one, last fall, in ESL and now in Spring, Accounting Course, but why accounting? I would love to be Assistant Administrative. I do not have idea how many students are at COM, but we are all dealing with many responsibilities like our job, kids, bills, the learning process is different, the teaching process is completely different.

But what about if you have been living all these challenges but, in another language, different than yours? Feel lost just because a word, overnight just lost your writing abilities (I do not want mention grammar/ I did!) feel like everything go slow, no recognize programs that before were so easy to navigate, trying! if you do not try, you will never learn, well, do not have the same results in other language, feel halted because your brain does not have the right word in that moment. My first week I was thinking of withdrawing, yet today, I’m writing to be part in this Symposium, because it is about Decoding and Recoding the Self, decoding the Yeny who always believed in education for everybody.

### From Ruins to Reform: The 2001 Earthquake and the Religious Roots of El Salvador’s Transformation

Alvin Andrade, Lone Star College – Kingwood | Advisor: Mari Nicholson

This research focuses on the intersection of natural disasters and religion, more specifically regarding the 2001 earthquake in El Salvador and the long-term effects of religious interpretations on public attitudes and actions towards crime and gang violence in post-disaster times. For long, many have recognized the effects of religious initiatives, but fail to include the 2001 earthquake as a key factor in increasing religious methods to combat crime and gang violence. By analyzing and utilizing quantitative and qualitative analysis of survivors’ post-disaster, literature reviews’, and reports from ex-gang members and organizations, this research will explore the efforts and ultimate impacts of the Catholic and Evangelical communities as they intended to spiritually transform the nation out of ruin. These interpretations also influenced the establishment of faith-based organizations and rehabilitation programs in collaboration with churches to convert ex-gang members and provide education and activities to the youth. However, the paper also dives into the brutal methods of the Salvadoran government in efforts to diminish the pressing issue of crime. While the methods offered a short-term cleansing of the streets,

long term impacts showed that religious methods often had a greater influence on lowering gang violence. Ultimately, this research highlights the role of faith in post-disaster times and its ability to shape personal perspectives and national policies in their approach to crime and violence. Future research could indicate the role of poverty and lack of economic opportunities in gang recruitment in years following the “Dollarization” of the Salvadoran currency.

### **11:50 a.m. – 12:50 p.m. | Session C9** **Recoding the Engineer's Journey: Decoding Nontraditional Foundations and Developing Professional Identity Through VBA Programming | NONJURIED**

Advisor and Moderator: Ernest Carl McIntyre

Student Panelists: Maya Avila-Robbins, Carl Habashi, Kevin De Leon, Luz Renovato

For many COM engineering students, higher education is not a linear path, but a complex process of “decoding” lived experience to meet the rigors of a new discipline. These students arrive with a wealth of practical and generational knowledge that must be synthesized with the demands of a professional engineering identity.

This session explores the profound transformation of COM’s engineering students from “coding illiteracy” to “digital fluency.” We showcase final projects from students who began with no prior programming experience, ultimately mastering Excel VBA to solve complex, real-world engineering problems. These projects are more than functional automation; they are artifacts of embodied knowledge. When a student translates a physical principle into a logical script, they engage in a literal “recoding” of how they perceive the world.

By examining these programs, we can witness the transformed engineering mind that now carries mechanical principles and expresses them through algorithmic systems. Students move from the security of being told “how things work” to the empowered state of “the knower.” We invite the audience to witness how building an algorithm bridges the gap between abstract reasoning and tangible output, illustrating that to code is, ultimately, to know.

## **KEYNOTE SPEAKER**

*Speaker is funded by GCIC.*

### **1:10 – 1:45 pm | Keynote Talk and Q & A | LRC 131 Auditorium – Everyone Join Us, Please!**

Dr. Christina C. Cedillo: **Composing One’s “Self”: Decoding and Recoding as Rhetorical Relationship**

**Bio:** Christina V. Cedillo (she/they) serves as Professor of Writing and Rhetoric at the University of Houston – Clear Lake. Christina’s research draws from cultural rhetorics, critical race theory, disability studies, and decolonial theory to focus on embodied rhetorics and rhetorics of embodiment at the intersections of race, gender, and disability. Their work has appeared in journals including *College Composition & Communication*, *Rhetoric Society Quarterly*, *College English*, and the *Journal for the History of Rhetoric*, and in edited collections that include *Rhetorica Rising: Feminist Rhetorical Methods for Social Change* and *The Routledge Handbook of Ethnicity and Race in Communication*. Christina’s current project examines impressions of space and time that influence how marginalized communicators and their messages are perceived and received. Christina is also the lead editor of the *Journal of Multimodal Rhetorics*.

**Abstract:** We often define the “Self” in terms of individuality, as a person who can be understood as unique and distinct from others. On an everyday level, we just feel that we are individuals. However, this presentation invites attendees to consider how individuals are made. Defining the Self is a complicated matter, as confirmed by the countless rhetorical and philosophical texts composed over the last 2,000 years. From ancients like Plato and Aristotle to medieval writers like Hildegard of Bingen and Thomas Aquinas to contemporary critics like Maurice Merleau-Ponty and Sara Ahmed, thinkers have been unable to ignore the question: “What do we mean by the ‘Self’?” This long, complex history reveals that “decoding” the Self is not as easy as it may first appear. At different points in time, the Self has been defined in mystical terms, as an intellectual concept, or as the marriage of the body and the mind. More recently, rhetoricians and philosophers have begun to think of the Self as the intersection of relationships that we maintain with others and our environments. In other words, an individual’s identity depends on who they believe they are just as much as it depends on who they are not. We can only understand ourselves—our Selves—in relation to others: those we consider members of our communities or consider outsiders, those we like or dislike, those we know well or whom we will never meet, and even objects and the natural elements. In this way, Eurowestern thinkers have finally begun to echo Indigenous ways of thinking that recognize the principle of “All our relations”—the idea that we and the environment are all connected and responsible to one another—as the foundation of who we are. This talk provides a brief outline of some ways that Eurowestern and Indigenous thinkers have sought to “decode” the Self to highlight how we “recode” ourselves in relation to others as we go about our everyday lives. Then, Dr. Cedillo will invite attendees to consider how the processes of “coding,” “decoding,” and “recoding” the Self are affected by our always-embodied relationships to technologies like the Internet, social media, and AI. *Tell Me Where You’re From and I’ll Tell You Who You Are: Uplifting Identities and Places from the Margins.*

# THANK YOU

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Sincerely,

Professors Dalel Serda and Gwendolynn Barbee-Yow  
GCIC Academic Symposium Co-Chairs

