



HOSTOS STUDENT SYMPOSIUM

2025

Made possible with the support of the Ms. Mackenzie Scott's Gift: President's Initiatives.

Welcome to the third Hostos Student Symposium, made possible by Ms. Mackenzie Scott's Gift: President's Initiatives, the support of our School College Partnerships, ASAP program, and CSTEP/STEP programs. Today, we celebrate and recognize the academic work of 130 students. Our Student Symposium is an opportunity for students to showcase their achievements, projects, creative work, and research from this academic year. In its third year, the Hostos Student Symposium continues to be a college-wide celebration of the work that takes place in our classrooms. At today's Symposium, we will be engaging with projects from all of our departments, ranging across fields including STEM, Allied Health, Game Design, Education, Literature, the Humanities and Behavioral and Social Sciences. We will be hearing from students at all different stages in their educational journey with us at Hostos—from those who are in the Honors, CSTEP, CRSP, and LSAMP programs, to students who are in our high school programs, our First Year Seminar, Capstone courses, students who are tutors in our Writing Center, and mentors with our First Year Experience. Each project today was completed with the support of a faculty or staff mentor who worked with the presenters to prepare them to share their work today. The rich variety and range of the projects in our program speaks to both the intellectual engagement of our students and to the dedication of our faculty. It took a great deal of care, time, and commitment from many faculty, staff, and administrators to make this day possible; a very heartfelt thanks to all listed below and to all in attendance. I look forward to celebrating our students with you today!

Andrea Fabrizio, PhD
Dean, Office of Academic Affairs

President's Office

Thank you to President Daisy Cocco De Filippis for generously sponsoring this event and making the day possible.

Dr. Sofia Oviedo, Research Programs Director

Office Of Academic Affairs

Provost Shiang-Kwei Wang

Student Symposium Advisory Committee

Sarah Brennan

Karla Contreras

Shaneka Crossman

Ashant'e Diggs

Dean, Andrea Fabrizio (Chair

Dr. Yana He

Diandra Jugmohan

Prof. Moise Koffi

Prof. Madeline Ford

Prof. Eric Ritholz Prof. Yoel Rodríguez

Prof. Marcelo Díaz Viana Neto

Prof. Nicole Wallenbrock

Academic Computing Center

Rafael Nunez-Taveras

ASAP

Siddique Mohamed

Nathaly Rodriguez

Athletics

Brent Wilson

Communications

Wilfredo Burgos-Matos

José R. García

Ivano Leoncavallo

Conference Center

Kelsey Schmitz

Duplicating

David Floyd

Copyediting

Sarah Key

ED Tech

Carlos Guevarra

Shovon Lee

Iber Poma

Eric Ritholz

Facilities

Mitchell Rivera

Mario Rosario

Registrar

Sherin Mathew

Office of School-College Partnerships

Elizabeth Wilson

Christine Coronado

Ashant'e Diggs

Public Safety

Chief Arnaldo Bernabe

Student Government Association

Dainma Martinez, President

Visual and Performing Arts Unit/ Humanities Department

Emmanuel R. Diaz

A special thank you to Prof. Marcelo Díaz Viana Neto for the year's Symposium poster design and program cover art.

Symposium Volunteers and Moderators

Prof. Nieves Angulo

Prof. Heidi Bollinger

Sarah Brennan

Dr. Yana He

Edward Hernandez

Prof. Sarah Hoiland

Prof. Ernest Ialongo

Maria Juarez

Prof. Diandra Jugmohan

Prof. Moise Koffi

Prof. Emmanuel A. Velayos Larrabure

Prof. Inmaculada Lara-Bonilla

Prof. Ruth Lewis

Prof. Alison Lowenstein

Graciano E. Matos

Prof. Clara Nieto-Wire

Prof. Nelson Nuñez-Rodríguez

Prof. Tram Nguyen

Prof. Domenica Perez

Kyanna Pratt

Dr. Eric Radezky

Prof. Márcia Ribeiro

Associate Dean Carlos Rivera

Lisanette Rosario

Michelle-Lee St. Marthe

Prof. Kristen Tran

Prof. Dionicio Taveras

Prof. Eliana Vasquez

Prof. Nicole Wallenbrock

Eileen Will

Edward Hernandez

Elizabeth Wilson

Prof. Lauren Wolf

Prof. Natasha Yannacañedo

Prof. Elizabeth Garcia de Souza

Prof. Charles I. Drago

Prof. Madeline Ford

Prof. Melanie Garcia

Lauren Genao

Associate Dean Johanna Gomez

Faculty Mentors

Prof. Gail August

Prof. Nieves Angulo

Prof. Thomas Barber

Prof. Heidi Bollinger

Prof. Kristopher Burrell
Prof. Annie Chitlall
Karla Contreras
Prof. Reginald Dorcely
Prof. Elizabeth Garcia de Souza
Prof. Nancy Genova
Prof. Teresa Gray
Prof. Sarah Hoiland
Prof. Ernest Ialongo
Prof. Fiordaliza Ippolito
Prof. Anna Ivanova
Prof. Biao Jiang
Prof. Cynthia Jones
Prof. Faisal Khan
Prof. Moise Koffi
Prof. Hee Chul Lee
Prof. Saadia Lgarch
Prof. Damaris Lois-Lang
Prof. Andrew London
Prof. Alison Lowenstein
Prof. Sonia Maldonado Torres
Prof. Anna Manukyan
Prof. Srecko Mavrek
Prof. Dejolie Mbe Fokam
Prof. Alexandra Milsom
Prof. Megan Mullaney
Prof. Tram Nguyen
Prof. Nelson Nuñez-Rodríguez
Prof. Vladimir Ovtcharenko
Prof. Ana Ozuna
Prof. Tanvir Prince
Prof. Simona Prives
Dr. Silvia Reyes
Prof. Marcia Riberio
Prof. Yoel Rodríguez
Prof. Debasish Roy

Prof. Aaron Botwick
Prof. Lakisha Brooks
Prof. Kristopher Burrell
Prof. Alida Camacho
Prof. Joseph Carvalho
Prof. Michelle Cheiken
Prof. Annie Chitlall
Prof. Marcelo Díaz Viana Neto
Prof. Joey Snavely
Prof. Antonios Varelas
Prof. Emmanuel A. Velayos Larrabure
Prof. Nicole Wallenbrock
Prof. J.C. Williams
Prof. Lauren Wolf



Hostos Student Symposium

Schedule Overview

9:00-9:50 am

Opening Ceremony and Breakfast

Location: C-building Cafeteria

Greetings: President Daisy Cocco De Filippis

Provost Shiang-Kwei Wang

Dean Andrea Fabrizio

Keynote Address: Kendall Queen, PhD, robotic software engineer

Concurrent Student Presentations beginning at 10:00 am

Locations:

Faculty Dining Room

C-391

C-560

C-561

C-564

C-565

11:00 am-12:00 pm: Concurrent Student Presentations

Locations:

Faculty Dining Room

Hostos Research Center

C-560

C-561

C-564

12:00-1:00 pm: Celebration Luncheon for Student Presenters, Mentors, and Volunteers

Location: Hostos Cafeteria

1:00-2:00 pm: STEM Poster Session

Location: Gym

2:00-3:00 pm: Concurrent Student Presentations

Locations:

Hostos Research Center

C-391

C-560

C-561

3:00-4:00 pm: Concurrent Student Presentations

Locations:

C-560

C-561

Keynote Speaker



Kendall Queen, Ph.D.

is a Robotic Software Engineer at Asylon Robotics who specializes in robotic security using drone and robotic dog platforms. Originally from Maryland, Kendall found his way to Philadelphia to study Robotics and Computer Vision at the University of Pennsylvania's GRASP Laboratory. While there, his work focused on autonomous driving using brain-inspired vision sensors that replicate the visual processes of the human eye. Though his work is in Robotics, his passion resides in empowering youth to think critically about their dreams and goals to take calculated steps toward achieving them.

“Without Commitment you will never start, but without Consistency you will never finish.”-Denzel Washington

Opening Ceremony Presentations

C-Building Faculty Dining Room, 3rd FL, 10:00-10:45

Moderator: Sarah Brennan

Student Presenter: Jorge Sanz & Maya Jean

Faculty Mentor: Prof. Lauren Wolf

Title: Unveiling Implicit Bias in AI: A Focus on the Impact on Marginalized Communities

Abstract: Beliefs inherently shape our social systems and influence interpersonal interactions. As technological innovation accelerates, it becomes imperative to scrutinize how social biases permeate artificial intelligence (AI), potentially perpetuating systemic inequities. This study delves into the manifestation of implicit biases within AI systems, particularly focusing on their adverse effects on marginalized populations. Drawing from Patrick K. Lin's "Machine See, Machine Do," we explore the notion that the proliferation of algorithms in public institutions stems from societal discomfort with uncertainty, leading to over-reliance on ostensibly objective AI systems. However, these systems often mirror existing prejudices, thereby reinforcing discrimination. Furthermore, through the lens of Virginia Eubanks' "Automating Inequality," we examine the deployment of AI in assessing recidivism risks, highlighting how embedded biases disproportionately target and disadvantage economically disadvantaged individuals and communities of color. By critically analyzing these dynamics, our research aims to illuminate the ethical implications of biased AI and advocate for more equitable technological practices.

Student Presenter: Breanna Wright & Quentin Hines

Faculty Mentor: Prof. Saadia Lgarch

Title: Tokenization and Blockchain: Revolutionizing Digital Assets and Transactions

Abstract: Blockchain, smart contracts, and tokens are revolutionizing how we trade and manage assets in the digital world. Blockchain is a decentralized, secure system that records transactions transparently. It allows the creation of digital tokens, which represent ownership or rights to both digital and physical assets. Tokenization transforms assets into digital forms, enabling easier trading and management. Building on blockchain's capabilities, Ethereum is a widely used platform that supports smart contracts, which are self-executing agreements with built-in rules. These contracts use blockchain's security and transparency to automatically enforce terms, ensuring trust and efficiency without middlemen. By combining smart contracts with tokenization, blockchain simplifies asset management and trading, making transactions faster, safer, and more transparent.

Student Presenter: Ashley Thomas (*Early College: HERO*)

Faculty Mentor: Fiordaliza Ippolito

Abstract: HERO from the Bronx, Young Poetry Voices Projects is a collaborative project with Professor Ippolito, my Spanish professor. The poem reflects, cultural, social, personal, and historical aspects. Each poem inspires creativity and encourages the literary writing of young poets with diverse narrative voices. It provides a platform for emerging young voices to be heard and celebrated.

Student Presenter: Brayan Roman Jimenez (*Early College: HERO*)

Title: M-mm y n-name is

Abstract: HERO from the Bronx, Young Poetry Voices Projects is a collaborative project with Professor Ippolito, my Spanish professor. The poem reflects cultural, social, personal, and historical aspects. Each poem inspires creativity and encourages the literary writing of young poets with diverse narrative voices. It provides a platform for emerging young voices to be heard and celebrated.

Concurrent Presentations

C-Building Room 391, 3rd FL, 10:00-10:45

Moderator: Tram Nguyen

Student Presenter: Luis Alberto Diaz Miranda

Faculty Mentor: Prof. Thomas Barber

Title: An Unexpected Goodbye Essay

Abstract: This essay, “An Unexpected Goodbye,” demonstrates that everyone has a story to tell. Luis Diaz, a student at Hostos Community College, tells his history. At the age of 18, he was faced with the heartbreaking decision to leave his family to pursue the American Dream. This painful goodbye initiated a new chapter in his life, new circumstances, and a new beginning. Through vivid details, Diaz describes the day he had to say goodbye to his family and how painful and heartbreaking of a separation it was. But the essay also shows that in life, everything happens for a reason, and sometimes saying goodbye is necessary to find our path and our purpose in life. Diaz wrote about this personal experience and made the

connection with the “Goodbye Chunky Rice” graphic novel for an English 111 assignment about saying goodbye.

Student Presenter: Leslie Perez (*Early College: Hostos-Lincoln Academy*)

Faculty Mentor: Prof. Thomas Barber

Title: Life

Abstract: I would like to present three poems—Deja Vu, Sun, and Through My Eyes; written in my English 203 Creative Writing class this spring. These poems explore our everyday experience, and my hope is to make people think about their own lives and the things we take for granted all around us. These poems are free-writes and speak about two separate experiences that made an impact on me. I aim to encourage people to write poems of all types, but especially about their everyday lived experiences.

Student Presenter: Destiny Young

Faculty Mentor: Prof. J.C Williams

Title: The Impact Racial Profiling Has on African American Men

Abstract: African American men have always been the target for wrongful racial profiling. Throughout the years we have seen many different events that took place involving men of color. Society usually paints African American men to be aggressive, angry, and not approachable. Black men are constantly being stereotyped and whether they are innocent does not seem to matter. People who are given power and authority tend to abuse this power when degrading and being very violent towards black men. This either leads to death or African American men being left traumatized by these organizations that are supposed to be there to protect and not harm them. The effects that this could have on men of color could vary. Some men hesitate when they are stopped by police whether it is walking or driving. They must constantly look over their shoulders, fearing if they will be able to make it to their destination safely.

Key Words: African American, degrading, authority, racial profiling, stereotype

Student Presenter: Jaila Perrin (*Early College: HERO*)

Faculty Mentor: Prof. Megan Mullaney

Title: In the Eye of The Storm All Is Quiet

Abstract: My life motto so far is “In the Eye of The Storm All Is Quiet,” used for when I’m stressed and, trying to get myself to calm down. I was inspired to create a model of “In the Eye

of the Storm All Is Quiet.” In my daily life, I find myself using my phrase very often, because of the positive impact that it has on me. I often use this phrase when I catch myself getting frustrated with someone, letting them agitate me. I tend to get upset pretty easily as I’m navigating adolescence. I’m learning how to manage my emotions towards keeping my composure, so my phrase helps me focus on what’s truly important, and not my emotions at that very moment. I learned this phrase from my mother mommy, making it even more important to me because she taught it to me. I believe that having a phrase or saying for when you know you’re about to do something rash is the best option, because often that saying or phrase does not tend to hurt anyone.

Student Presenter: Rzan Albahri (*Early College: Hostos-Lincoln Academy*)

Faculty Mentor: Prof. Hee Chu Lee

Title: Exploring Kidney Structure and Function: A Study of Dissection and Urinalysis

Abstract: The kidney is a crucial organ that plays a vital role in the urinary process. It filters blood, removes waste, regulates fluid, balances electrolytes, and excretes waste products through urine. This study examines the structure of the kidney through dissection, providing an analysis of key components, including the renal cortex, medulla, and renal pyramids. The role of these components in urine formation will be explored. Additionally, urinalysis will be used as a diagnostic tool to assess kidney efficiency, focusing on detecting abnormalities. This study connects kidney anatomy with real-world medical diagnostics by linking structural observations from dissection to the functional insights provided by urinalysis. Understanding the structure and function of the kidney will provide insights into renal physiology and kidney-related diseases.

Concurrent Presentations

C-Building Room 560, 5th FL, 10:00-10:45

Moderator: Annie Chitlall

Student Presenter: Yareli Martínez Paredes (*Early College: Hostos-Lincoln Academy*)

Faculty Mentor: Prof. Elizabeth García de Souza

Title: Fallen Leaves: When Love Begins to Hurt

Abstract: I wrote “Fallen Leaves: When Love Begins to Hurt” a story about domestic violence for my Creative Writing Workshop course last semester. October was around the corner, which is Domestic Violence Awareness month. I wanted to write something meaningful that resonates

with many readers. I believe it's common for teenagers to go through this situation since we are still experiencing what love feels like and confuse it with what's right and wrong. Furthermore, many people think abuse is only physical, but it can be emotional as well. My goal is to raise awareness and to encourage victims who might be going through similar experiences. I hope the audience can better understand this topic and why some people may find their relationship "hard to leave." For those who might be stuck in a similar situation as the main character in this story, I hope they realize it is never too late to get out of an abusive relationship.

Student Presenter: Nadiatou Galbane (*College Now: Bronx Academy of Health Careers*)

Faculty Mentor: Prof. Nicole Wallenbrock

Title: Paludism (Malaria)

Abstract: The project I would like to present is Malaria, which is a type of disease caused by Mosquitoes. It is the big problem that is killing people now in Africa. This disease has caused many consequences, because the population and the government do not have enough money to buy supplies such as vaccines. I would really like to present this problem, so the residents of the United States can be informed or have an experience of what kind of problems exist in Africa.

Student Presenter: Ashley Tellez (*Early College: HERO*)

Faculty Mentor: Prof. Fiordaliza Ippolito

Title: Comfort Zone

Abstract: HERO from The Bronx, Young Voices Project is a collaborative project with Professor Ippolito, my Spanish Professor. The poems reflect cultural, social, personal, and historical aspects. Each poem inspires creativity and encourages the literary writing of young poets with diverse narrative voices. It provides a platform for emerging young voices to be heard and celebrated.

Student Presenter: Destiny Ohakam (*Early College: HERO*)

Faculty Mentor: Prof. Fiordaliza Ippolito

Title: The Tribulations of an Eldest Daughter

Abstract: HERO from the Bronx, Young Poetry Voices Project is a collaborative project with Professor Ippolito, my Spanish Professor. The poems reflect cultural, social, personal, and historical aspects. Each poem inspires creativity and encourages the literary writing of young poets with diverse narrative voices. It provides a platform for emerging young voices to be heard and celebrated.

Student Presenters: Esteicy Mora Gil (*Early College: HERO*)

Faculty Mentor: Prof. Fiordaliza Ippolito

Title: Ella me dice que no

Abstract: HERO from the Bronx, Young Poetry Voices Project is a collaborative project with Professor Ippolito, my Spanish Professor. The poems reflect cultural, social, personal, and historical aspects. Each poem inspires creativity and encourages the literary writing of young poets with diverse narrative voices. It provides a platform for emerging young voices to be heard and celebrated.

Concurrent Presentations

C-Building Room 561, 5th FL, 10:00-10:45

Moderator: Madeline Ford

Student Presenter: Jumai Oluwadamilare (*Early College: HERO*)

Faculty Mentor: Prof. Fiordaliza Ippolito

Title: Woman of Power

Abstract: HERO from the Bronx, Young poetry voices project is a collaborative project with Professor Ippolito, my Spanish Professor. The poems reflect cultural, social, personal, and historical aspects. Each poem inspires creativity and encourages the literary writing of young poets with diverse narrative voices. It provides a platform for emerging young voices to be heard and celebrated.

Student Presenter: Kaylee Leon (*Early College: HERO*)

Faculty Mentor: Prof. Fiordaliza Ippolito

Title: La Esperanza

Abstract: HERO from the Bronx, Young Poetry Voices Project is a collaborative project with Professor Ippolito, my Spanish Professor. The poems reflect cultural, social, personal, and historical aspects. Each poem inspires creativity and encourages the literary writing of young poets with diverse narrative voices. It provides a platform for emerging young voices to be heard and celebrated.

Student Presenter: Nia Lanham (*Early College: HERO*)

Faculty Mentor: Prof. Fiordaliza Ippolito

Title: Problems in the Health Body

Abstract: HERO from the Bronx, Young Poetry Voices Project is a collaborative project with Professor Ippolito, my Spanish Professor. The poems reflect cultural, social, personal, and historical aspects. Each poem inspires creativity and encourages the literary writing of young poets with diverse narrative voices. It provides a platform for emerging young voices to be heard and celebrated.

Student Presenter: Sandra Serrano Cabrera (*Early College: HERO*)

Faculty Mentor: Prof. Fiordaliza Ippolito

Title: The Wonders of Music

Abstract: HERO from the Bronx, Young Poetry Voices Project is a collaborative project with Professor Ippolito, my Spanish Professor. The poems reflect cultural, social, personal, and historical aspects. Each poem inspires creativity and encourages the literary writing of young poets with diverse narrative voices. It provides a platform for emerging young voices to be heard and celebrated.

Concurrent Presentations

C-Building Room 564, 5th FL, 10:00-10:45

Moderator: Natasha Yannacañedo

Student Presenter: Xitlali Romero (*Early College: HERO*)

Faculty Mentor: Prof. Fiordaliza Ippolito

Title: Mi Raza

Abstract: HERO from the Bronx, Young Poetry Voices Project is a collaborative project with Professor Ippolito, my Spanish Professor. The poems reflect cultural, social, personal, and historical aspects. Each poem inspires creativity and encourages the literary writing of young poets and diverse narrative voices. It provides a platform for emerging young voices to be heard and celebrated.

Student Presenter: Crismarie Perez (*Early College: HERO*)

Faculty Mentor: Prof. Fiordaliza Ippolito

Title: Darkness Is in the Light

Abstract: HERO from The Bronx, Young Poetry Voices Project is a collaborative project with Professor Ippolito, my Spanish Professor. The poems reflect cultural, social, personal, and historical aspects. Each poem inspires creativity and encourages the literary writing of young poets with diverse narrative voices. It provides a platform for emerging young voices to be heard and celebrated.

Student Presenter: Francisco Flores (*Early College: HERO*)

Faculty Mentor: Prof. Fiordaliza Ippolito

Title: Francisco's Poem

Abstract: HERO from The Bronx, Young poetry voices project is a collaborative project with Professor Ippolito, my Spanish Professor. The poems reflect cultural, social, personal, and historical aspects. Each poem inspires creativity and encourages the literary writing of young poets with diverse narrative voices. It provides a platform for emerging young voices to be heard and celebrated.

Student Presenter: Jessica Sebuabey (*Early College: HERO*)

Faculty Mentor: Prof. Fiordaliza Ippolito

Title: My Life

Abstract: HERO from the Bronx, Young Poetry Voices Project is a collaborative project with Professor Ippolito, my Spanish Professor. The poems reflect cultural, social, personal, and historical aspects. Each poem inspires creativity and encourages the literary writing of young poets with diverse narrative voices. It provides a platform for emerging young voices to be heard and celebrated.

Concurrent Presentations

C-Building Room 565, 5th FL, 10:00-10:45

Moderator: Lauren Wolf

Student Presenter: Muntaha Ali (*Early College: HERO*)

Faculty Mentor: Prof. Fiordaliza Ippolito

Title: Ishma's Poem

Abstract: HERO from The Bronx, Young poetry voices project is a collaborative project with Professor Ippolito, my Spanish Professor. The poems reflect cultural, social, personal, and historical aspects. Each poem inspires creativity and encourages the literary writing of young poets with diverse narrative voices. It provides a platform for emerging young voices to be heard and celebrated.

Student Presenter: Nhaily Camille Edwards (*Early College: HERO*)

Faculty Mentor: Prof. Fiordaliza Ippolito

Title: Romana At Heart

Abstract: HERO from the Bronx, Young Poetry Voices Project is a collaborative project with Professor Ippolito, my Spanish Professor. The poems reflect cultural, social, personal, and historical aspects. Each poem inspires creativity and encourages the literary writing of young poets with diverse narrative voices. It provides a platform for emerging young voices to be heard and celebrated.

Student Presenter: Tianna Burrowes (*Early College: HERO*)

Faculty Mentor: Prof. Fiordaliza Ippolito

Title: Luchando mi mayor consuelo y mi mayor enemigo

Abstract: HERO from the Bronx, Young Poetry Voices Project is a collaborative project with Professor Ippolito, my Spanish Professor. The poems reflect cultural, social, personal, and historical aspects. Each poem inspires creativity and encourages the literary writing of young poets with diverse narrative voices. It provides a platform for emerging young voices to be heard and celebrated.

Student Presenter: Washely Mercedes (*Early College: HERO*)

Faculty Mentor: Prof. Fiordaliza Ippolito

Title: My Life as a Dominican Living in NYC

Abstract: HERO from the Bronx, Young Poetry Voices Project is a collaborative project with Professor Ippolito, my Spanish Professor. The poems reflect cultural, social, personal, and historical aspects. Each poem inspires creativity and encourages the literary writing of young poets with diverse narrative voices. It provides a platform for emerging young voices to be heard and celebrated.

Concurrent Presentations

C-Building Room 391, 3rd FL, 11:00-12:00

Honors Students

Moderator: Ernest Ialongo

Student Presenter: Giavanna Perez

Faculty Mentor: Prof. Aaron Botwick and Prof. Kristopher Burrell

Abstract: The goal of this project is to examine the issue of misdiagnosis in medicine, with a focus on how gender bias contributes to the underdiagnosis and misdiagnosis of women. Historically, medical research and diagnostic criteria have been based on male-centric models, leading to disparities in how symptoms are recognized and treated in women. This project highlights key areas where these biases are most evident, such as in cardiovascular disease, autoimmune disorders, mental health, and chronic pain conditions. Through an analysis of existing research and case studies, this work demonstrates how systemic biases impact patient outcomes and emphasizes the need for more inclusive medical education and research. The findings show in depth the urgency of addressing gender disparities in healthcare to improve diagnostic accuracy and patient care. The takeaway for the audience is a deeper understanding of how gender bias affects medical outcomes and the necessity for continued advocacy and reform in the healthcare system. This work contributes to the field of medical research by reinforcing the importance of diagnostic practices and encouraging further investigation into gender-specific healthcare disparities.

Student Presenter: Jorge Sanz

Faculty Mentor: Prof. Ernest Ialongo

Title: The Impact of Lyme's Disease on the Central Nervous System: A Focus on Bell's Palsy

Abstract: This presentation will explore Lyme's Disease, specifically how the infection affects the central nervous system, leading to complications such as Bell's Palsy. The presentation will examine the pathophysiology of Lyme's Disease, its impact on neurological health, and how the disease can manifest in facial paralysis (Bell's Palsy). Personal experiences, scientific studies, and case reports will be used to demonstrate the connection between Lyme's Disease and neurological symptoms.

Presentation goals:

1. To understand the mechanism by which Lyme's Disease affects the central nervous system.
2. To examine the relationship between Lyme's Disease and the development of Bell's Palsy.
3. To explore the symptoms, diagnosis, and treatment options for individuals experiencing Bell's Palsy as a result of Lyme's Disease.
4. To highlight the importance of early detection and treatment of Lyme's Disease to prevent neurological complications.
5. To discuss potential long-term effects on individuals diagnosed with both Lyme's Disease and Bell's Palsy.

Student Presenter: Qediah Chaplin

Faculty Mentor: Prof. Aaron Botwick

Title: The Importance of Honoring Black Art and Literature in America

Abstract: This project investigates the importance of black art and literature, in the progression of the African American movement towards civil rights and a better living. It analyzes specific moments in time, like the 1950's through the 1970's, with movements like the Harlem Writers Guild, and the Black Arts Movement. This project will magnify the voice that art and literature gave to Black Americans through writers like Maya Angelou, Audre Lorde, and Sarah E. Wright, during these times. I believe this project will accomplish the goal of recognizing the necessity of art in African American culture on a more intimate level. I hope at the end of this; my audience will walk away with a sense of empowerment. Or at least a sense of "knowing." If I can expand the knowledge of at least one person in the audience, then they can pass it on. As a future educator this is not only my career goal, but my passion. This project will help me to build my skill set in teaching, so that I can become an educator that makes a difference. I can only welcome and embrace this opportunity with open arms.

Student Presenter: Keyla Rodriguez

Faculty Mentor: Prof. Srecko Mavrek

Title: Healing in Water: Swimming as a Supportive Exercise for Scoliosis

Abstract: This research project explores the benefits of swimming as a therapeutic and supportive exercise for teenagers with scoliosis. Scoliosis, a condition characterized by an abnormal curvature of the spine, can lead to pain, reduced mobility, and postural challenges. While traditional treatments include bracing and, in severe cases, surgery, physical activities such as swimming offer a low-impact, full-body workout that may help improve posture, muscle strength, and flexibility.

This study will examine how swimming contributes to spinal health by reducing strain on the back, promoting core stability, and enhancing overall well-being in adolescents with scoliosis. It will include a review of expert opinions from physical therapists and swim coaches, and, if possible, case studies from teens who engage in swimming as part of their scoliosis management.

Student Presenters: Franyeli Contreras

Faculty Mentor: Prof. Anna Manukyan

Title: Exploring the Role of Modified PNA in Binding to DNA or RNA

Abstract: This proposal details a comprehensive exploration of the chemical, biophysical, structural, and biological attributes of peptide nucleic acid (PNA) molecules, with an specific focus on studying the differences in the efficiency of cpPNA and thfPNA. Early studies showed that adding cyclopentane (cp) groups to the aegPNA backbone helps make the structure more rigid, causing it to take on a right-handed helical shape. This shape improves its ability to bind to complementary nucleic acids. However, the cp rings, being hydrophobic, do not improve solubility. This challenge led to the rationale for incorporating a more polar five-member ring such as tetrahydrofuran (thf) group, which could counteract the limitations of cpPNA. This addition gave rise to a tetrahydrofuran derived PNA, called thyclotides. It was recently proven that thyclotides containing thf at every position in a PNA sequence exhibit an extraordinary cellular uptake and potent inhibitory effects on miRNA targets.

Our goal is to lead a more refined understanding of the innovative strategy's potential to advance PNA-based therapeutics, addressing any possible challenges related to cytotoxicity, endosome entrapment, and achieving effective target sequence inhibition.

Concurrent Presentations

C-Building Faculty Dining Room, 3rd FL, 11:00-12:00

Honors Students

Moderator: Elizabeth Wilson

Student Presenter: Lydia M. Perez Rodriguez

Faculty Mentor: Prof. Alida Camacho

Title: The Effects of Vaping on Oral Health

Abstract: The goal of this project will be discussing the detrimental impact of vaping on oral health, debunking the common misconception that it is a safe alternative. This project will accomplish spreading awareness about the negative oral health effects associated with vaping. Through visual comparisons of a healthy oral cavity versus those damaged by vaping, this project will highlight both acute conditions (such as gum inflammation) and chronic issues (including tooth discoloration, gum recession, and severe decay). Data from scientific studies will demonstrate how chemicals like nicotine from vaping disrupts oral health, leading to an increased susceptibility to gum disease and cavities. To address these concerns, the project recommends that colleges provide free dental screenings and initiate awareness through campaigns to educate students on the serious risk of vaping and promote healthier choices to those in need. By including reliable references and credible sources to support my claims and strengthening my argument, I intend to showcase how seriously damaging vaping can be to oral health. The main takeaway is the importance of raising awareness and supplying crucial information to the governing body of Hostos Community College. By doing so, we can equip them to better support students who are struggling with vaping and ultimately help address and reduce this growing concern on campus. Furthermore, the insights gained from this study hold significant potential for guiding future research endeavors in this area.

Student Presenter: Marco Alvarez

Faculty Mentor: Prof. Sarah Hoiland

Title: Shattered Bonds: Tracing the Origins and Impact of Child Welfare in the United States

Abstract: The foster care system in the United States disproportionately targets marginalized communities, reinforcing cycles of poverty, homelessness, and incarceration. This research critically examines how systemic racism and institutional oppression are embedded in both the historical roots and current practices of foster care. Using an intersectional lens, it explores how race, class, and institutional bias shape the experiences of vulnerable families. Despite claims of protection, child welfare policies continue to surveil and remove children from marginalized communities at disproportionate rates. These interventions often lead to long-term consequences, including increased risk of arrest and incarceration. By taking a historical analysis, integrating statistical data, foundational texts, and personal narratives, this project connects systemic critique with lived experience to reveal the human cost of these failures. Ultimately, it argues for urgent reform that shifts the system from punishment to support, emphasizing prevention, family preservation, extended benefits, and community-based solutions that prioritize justice and healing.

Student Presenter: Victoria Paulino

Faculty Mentor: Prof. Sonia Maldonado Torres

Title: Fostering Inclusive Spaces: The Importance of Integrating Multicultural Practices in the Teaching-Learning Process

Abstract: This project explores the importance of implementing multicultural education in classrooms. Despite the growing diversity in U.S. schools, many institutions still lack inclusive teaching practices to support culturally and linguistically diverse students(1). As the daughter of an immigrant mother and a native Spanish speaker, I experienced firsthand the challenges of navigating an educational system that did not foster inclusivity. Many classrooms failed to provide practices that made students feel seen and valued. This project identifies effective strategies educators can use to create learning environments where all students feel recognized, ultimately promoting equal opportunities for academic success. A written summary of these practices will be provided.

Reference:

- (1) Sanchez-Medina, M.G. (2024). Leading successful schools for culturally and linguistically diverse students. Doctoral Dissertation, Fordham University, Bronx, New York.

Student Presenters: Walfri Restitullo

Faculty Mentor: Prof. Cynthia Jones

Title: How Corporate Mergers in the Grocery Industry Affect Your Wallet: What Can We Do About It?

Abstract: My project will examine the proposed merger between Kroger and Albertsons, two of the largest supermarket chains in the United States. The study will explore the potential impacts on the grocery industry, including market competition, consumer choice, pricing, and labor. My analysis will also consider the regulatory challenges the merger might face, particularly regarding antitrust concerns like the Federal Trade Commission, and how it could reshape the landscape of retail grocery in the United States.

Concurrent Presentations

C-Building Hostos Research Center, 1st FL, 11:00-12:00

Moderator: Nicole Beth Wallenbrock

Student Presenters: Aissetou Gallabane Rafael Jourdain, & Nadiatou Galbane (*College Now: Bronx Academy of Health Careers*)

Faculty Mentor: Prof. Nicole Wallenbrock

Title: Marriage at Young Age (Teenagers)

Abstract: In our time period (today) girls as young as 15, 16, and 17 are getting married and it has been normalized. For example, in Africa young girls are getting married and leaving schools early instead of getting their education. Some of them think school doesn't always lead to success (because most people in Africa finish school, but the government does not offer them a job opportunity) true, but a reminder school is not only about getting success but getting a higher education, getting your experiences about life. also, some are getting hit by their husbands because they don't understand that they are still teenagers and still thinking how to get their life together, they think they are mature enough to act like a wife because they are actually in their teenage moment by that time. My message will be for teenagers to go to school and get their education (future).

Student Presenters: Raphael E. B. Jourdain (*College Now: Bronx Academy of Health Careers*)

Faculty Mentor: Prof. Nicole Wallenbrock

Title: What Is Happening in the Pearl of the Antilles?

Abstract: The situation that is happening in my country, Haiti, is terrible. The gangs have in their possession more than half of the capital and they use cruel methods to put pressure on the population. They kidnap, and extort money from the population so that they leave them alone; this tension is the cause of people moving and they do not even have a destination. The politicians do not say anything about the situation. The police do not have enough equipment to defend civilians. There are even some places where the people defend themselves against these malicious individuals with the little they have. Maybe it is a well-planned plan because when someone from the police tries to do something the politicians push him to resign? Will this lead to a civil war?

Student Presenter: Louvinious Shuhari, Nedelyn Helena-Diaz, Cynthia Remadji Bongo, & Jose Vargas

Faculty Mentor: Prof. Moise Koffi

Title: Sustainable Automation for Low-Maintenance Terrariums: Enhancing Efficiency and Plant Care

Abstract: A terrarium involves managing light, water, and temperature to support plant growth, which can be time-consuming and challenging for individuals with busy schedules. This project aims to design and develop an automated terrarium system that streamlines these tasks while prioritizing sustainability. Integrating energy-efficient technology will minimize power consumption and enhance plant care, making the terrarium both low-maintenance and environmentally friendly. The performance of the automated terrarium will be evaluated against a traditional, non-automated system to assess improvements in efficiency and effectiveness in plant maintenance. This development is implemented using the ARCADIA method, which is a model-based systems engineering design approach. This methodology

provides a framework of design for complex systems. The autonomous terrarium is a design that will involve mechanical, electrical, software and system engineering.

Student Presenter: Cindy Perez & Leslie Perez (*Early College: Hostos-Lincoln Academy*)

Faculty Mentor: Prof. Hee Chul Lee

Title: Zika Virus

Abstract: Zika virus is a mosquito-borne virus. It is most commonly spread to people by the bite of an infected Aedes species mosquito. If a pregnant woman is infected with the zika virus it can be passed on to her fetus and can cause birth defects. We chose to speak on this topic because we want to educate and inform others about the dangers and negative effects of the zika virus and to spread awareness. We hope to inform the audience, especially the women in the audience, about the Zika virus so they can protect themselves when traveling to countries with the Zika virus. This project focuses most particularly on the zika virus's impact on human anatomy, especially fetal development.

Concurrent Presentations

C-Building Room 560, 5th FL, 11:00-12:00

Moderator: Heidi Bollinger

Student Presenter: Nadine Nicole James

Faculty Mentor: Prof. J. C. Williams

Title: Psychologically and Creatively Embedding Artificial Intelligence (AI): The Groundwork for Future Generations

Abstract: Artificial Intelligence (AI) dates back to the 1700s, originating from the concept of machines thinking like humans. The possibility came to realization in the 1950s. Dartmouth College, at a conference which was organized by John McCarthy, Marvin Minsky, Nathaniel Rochester, Claude Shannon, a group of researchers who marked the birth of artificial intelligence field. AI is creative and is exceptionally prevalent among adolescents and young adults, also gaining momentum with a fraction of older adults. Even though AI is considered to be in its early stages, it is clearly gaining traction with the younger generation. AI potentially will provide a future from driverless cars to increased access to personalized healthcare diagnosis and treatments. Ethics must also play a role in developing AI. It must serve to benefit humanity. If AI is to benefit us, we should also consider the fact that the rampant use of AI is a technological adversary to the truth.

Student Presenter: Rainey Colon Cabrera, Desriana Hernandez, & Donte Duran

Faculty Mentor: Prof. Heidi Bollinger

Title: The Undrowned Panel: Tragic Flaws in Angie Cruz's Novel

Abstract: Our presentation, “The Undrowned Panel: Tragic Flaws in Angie Cruz's Novel,” examines the tragic flaws of Cara Romero, the resilient yet flawed protagonist of *How Not to Drown in a Glass of Water* by Angie Cruz. Through a focused character analysis, we will explore the distinct flaws that hinder Cara's ability to adapt, build and maintain healthy relationships, and navigate personal adversities. While making Cara deeply human, these flaws also contribute to the hardships she faces throughout her whole life. From a childhood lacking demonstration of care to an adulthood unable to demonstrate love, her inner battles shape her path. By analyzing Cara's struggles from a literary and psychological perspective, we aim to highlight the novel's portrayal of resilience, self-sabotage, and personal growth. This panel invites spectators to reflect on how universal nature of human imperfection and obstacles stand in the way of self-awareness, fostering a deeper appreciation for Cruz's storytelling embedded in Cara's journey.

Concurrent Presentations

C-Building Room 561, 5th FL, 11:00-12:00

Moderator: Graciano E. Matos

Student Presenter: Ginary Muniz (*Early College: HERO*)

Faculty Mentor: Prof. Lakisha Brooks

Title: My Motto and Its Origin

Abstract: I will be exploring the prompt, “What is your life motto? How does your definition of success influence your life motto?” After spending almost 4 years at HERO High School, I've experienced many moments that have helped me solidify a life motto that I live and stand by. And with so many enriching experiences, it has molded my definition of success into one that best fits me. My goal is to invoke understanding for my life motto and to expand other's thinking on what success means to me beyond surface-level value. My project accomplished detailing what has made me into the person I am now, and how it has shaped me for my future endeavors. I hope that the audience takes away how one must never truly give up, to continue working towards your dream, no matter how far the path seems to extend. My main point is how my understanding of my identity and my experiences with others have molded me into the

person I've always strived to be. My work contributes to my desired field in medicine, as it illustrates my passion and dedication to what I aspire to be as a nurse.

Student Presenter: Karla Williams (*Early College: HERO*)

Faculty Mentor: Prof. Megan Mullaney

Title: Hope for the Future and the Great Things It Has to Unfold

Abstract: This creative work is a letter to my future self to show me what I have learned over the years and how I have grown as a person. The poem is designed to be a positive reflection about the work that I have accomplished and what I believe that I need to work on. I believe that things will happen to change who you are as a person. I want to tell my future self that no matter what happens to me, I could push through and persevere. In this letter, I hope that I am starting on my journey to become a nurse. My goal is to be the first person in my family to graduate college. I recognize that this is not an easy journey and I will not sugarcoat the struggles that I am facing now and what I can do to fix them, so that I will not have the same problems in the future. I will have more responsibility than I now have, and how I will work to do my best. This letter contains the hopes for my future.

Student Presenter: Michael Antwi

Faculty Mentor: Prof. J. C. Williams

Title: A Framework for Understanding and Addressing Black Men's Mental Health

Abstract: As a Black man living in society, I have developed a profound awareness of the challenges we face. The lives of Black men are unfairly affected by societal pressures that necessitate a critical examination of African-centered psychology to improve their lives. Perceptions of Black men significantly impact their mental health, leading to issues such as incarceration, substance abuse, and neglected well-being down the road. Pursuing higher education while grappling with mental health challenges is particularly difficult for Black men. In academic settings, African self-consciousness and Black racial identity are often marginalized, affecting their self-esteem. Black men improve their psychological well-being variously by seeking support, self-reliance, substance use, or violence. Damaging encounters with law enforcement and avoidance of these experiences can contribute to depressive symptoms. To address these issues, an intersectional approach to mental health, especially within student affairs, is essential in understanding these challenges and promoting resilience among Black men.

Concurrent Presentations

C-Building Room 564, 5th FL, 11:00-12:00

Moderator: Eric Radezky

Student Presenter: Rushawn Simpson

Faculty Mentor: Prof. J. C. Williams

Title: The History and Meaning of African Tattooing

Abstract: The main purpose of this research study is to show the lack of understanding of the history and the meaning behind the ancient inscriptions and tribal tattoos of the African culture and how it pertains to the evolution of psychology in African culture. Seeing how African ancestors viewed tribal inscriptions, the different tribes who would condone them, and the tribes who would not have condoned. We also see how tattoo markings have evolved over the years in the African community today. There are different views on body markings; history shows us that not only were the tribal tattoos, body paint, and piercings an expression of art, but it was an integral part of African psychology. Psychological challenges were faced by many tribes; the process of tattooing is a painful process, most notably scarification. Inscriptions had no age limit, also giving individuals a social status within a given tribe.

Student Presenter: Andrea Santiago (*Early College: HERO*)

Faculty Mentor: Prof. Lakisha Brooks

Abstract: The goal of my project is to reflect on my overall growth from freshman year to present day. As I am months away from graduating high school, I have constructed a reflection piece entitled "Write a Letter To Your Freshman Self." I was able to look back on my four years of high school, including all of my experiences, both academic and personal. The audience may benefit from my project because of my ability to look back on my own mistakes and learn from them, while also informing others on what "not to do." The takeaway from this reflective essay is to show how my life has grown and changed, hopefully inspiring others in a way that allows them to grow in their own journey. I feel that the work that I've done over the course of this project contributes to my discipline as a student via my ability to be self-critical and use my weaknesses as points of growth to further my personal development in all facets of life.

Student Presenter: Aseya Ganie (*Early College: HERO*)

Faculty Mentor: Prof. Lakisha Brooks

Title: The Outcome

Abstract: The topic I will explore is “What is your life motto? How does your definition of success influence your life motto?” Everything happens for a reason. All the decisions that you make and the things that happen throughout your day are what lead to the outcome of your life. After four years in high school, I have come to realize that if you’re meant to have something, you will either work towards that goal or receive it with ease. If you’re not meant to have something or to go somewhere, something will be in the way of you completing your task, and that isn’t always bad. For me, success means having a family, people around me who I love, and being a physician assistant. If I am meant to get these things I will continue going down that path I am now. I believe that everything I am doing now like working as an intern and taking college classes is leading me down the right path. Even if I don’t receive these things now it doesn’t mean I won’t ever get it. I would be able to go down another path to get the same outcome if I need to.

STEM Poster Session

C-Building Gymnasium, 3rd FL, 1:00 – 2:00

Student Presenters: Amelia Lindha Eponghas

Faculty Mentor: Prof. Dejolie Mbe Fokam

Title: Enhancing Cybersecurity Awareness: Evaluating the Impact of Virtual Training on Knowledge and Behavior

Abstract: As cyber threats evolve, effective cybersecurity education is crucial. This study examines the impact of virtual cybersecurity training on knowledge retention and behavior. Between January 6 and 15, 2025, Hostos Community College's Department of Mathematics and Computer Science held six virtual Cybersecurity Awareness Workshops with CSTEP, MACSS, and Africatech Global Link INC. These sessions, which averaged 36 participants, used presentations, demonstrations, and Q&As to promote safer online practices. Post-session surveys from 31 participants showed cybersecurity knowledge ratings of "excellent" or "good" rose from 39% to 90%. Nearly all adopted password managers, multi-factor authentication, and email verification. Notably, 84% had never attended cybersecurity training, highlighting its necessity. Findings suggest that frequent workshops and stronger collaboration among faculty, student organizations, administrative departments, and external partners can enhance cybersecurity education, ensuring a more comprehensive approach to reducing cyber threats and improving digital security awareness.

Student Presenter: Anjanet Thomas

Faculty Mentor: Prof. Tram Nguyen

Title: NYC-City of Dreams: Chasing Wild Imaginations with Shattered Dreams and Finding Hope Through CUNY

Abstract: My project is an oral history interview and a written reflective piece on my family's generational experience while obtaining higher education through CUNY colleges. I interviewed and recorded the voices of my grandmother, mother, and teenage daughter, on their intersectional experiences of race and the educational system. I also highlighted the struggles that we have experienced while obtaining degrees, as well as demonstrating the difference that continuing your education can make on your life. I learned many things I did not know about my mother and grandmother. I was struck by their grit and determination to succeed despite extenuating circumstances. Through the process of reflecting on the voice recordings through writing short essays and a poem, I magnify our collective voices and our desires to succeed and learn. This project delves into how the importance of going to college for traditional high-earning jobs was a main priority for many generations, and how it is increasingly less important for the new generations of young people. I have learned through this project that this is not necessarily a bad thing, and I am encouraged to find that more people consider an education in the arts worthwhile.

Student Presenter: Kimberley Hill

Faculty Mentor: Prof. Tram Nguyen

Title: How Do You Solve A Problem Like (Christina) Maria? And Other Songs Of Mixed-Up Hearts

Abstract: The project I am presenting was created partly to highlight the dwindling archives for youth music predating the 2010s but postdating the 1970s. With the deletion of MTV News' archives, among others, musicians, academia, and the public now have little-to-no accessible youth music collections to utilize for lesson plans, research, studies, or personal learning, resulting in the further widening of information gaps for music historians, music professors, music students, and music listeners of all ages. I also believe it is essential that marginalized demographics, such as women and children within music, receive accurate and empathetic representation within academia. In addition, there are personal reasons as well, with the most urgent of them being, as a millennial woman and Digital Music student at Hostos Community College, I felt it was time to more critically examine the impact that my childhood favorites had on me, especially considering oftentimes, they were children too.

Student Presenter: Sterling Nicholas Wynn

Faculty Mentor: Prof. Tram Nguyen

Title: Foster Care or Force to Care

Abstract: My work is simply to navigate what it is like to grow up in a foster care home that has a religious background. I interviewed Alexis [name changed], a woman who, when she was a child, attended the same church as I and she was also a foster child who was never adopted but aged out of the system and traveled from home to home. Both of our biological parents

struggled with drug abuse. The church had a big influence on the fostering of orphans and that is how we connected. I had interviewed her, as well as my nephew who was in foster care for roughly 6 months as a child. For the creative part, instead of using their interview itself, I found ways to tell their story and mine through different types of poetry.

Student Presenter: Susan Guerrero

Faculty Mentor: Prof. Tram Nguyen

Title: The Bond That Shaped Me: A Student-Teacher Journey

Abstract: This project is a deeply personal exploration of grief, gratitude, and connection undertaken through an oral history interview and a reflective multimedia piece. Originally envisioned as an examination of the author's family's experience with higher education at CUNY, the project evolved into a powerful interview with Mr. Arevalo, a father figure who entered the author's life after the passing of their father. The interview focuses on Mr. Arevalo's impact and how he helped the author navigate their father's absence, leading to surprising reflections on grief and resilience. A key component of this project is a recorded message from the author to their late father, expressing gratitude not only for his life but also for the unforeseen gift of Mr. Arevalo's presence. This recording serves as a vulnerable and profound articulation of loss and the unexpected solace found in new connections.

Student Presenter: Anthony Gonzalez & Egli Gjuzi

Faculty Mentor: Prof. Yoel Rodríguez

Title: Discovery of BACE1 Inhibitors for the Treatment of Alzheimer's Disease

Abstract: Alzheimer's Disease (AD) is a brain disorder that progressively causes the brain to lose important regulatory functions. To this day there is no therapeutic cure. However, the inhibition of β -site amyloid precursor protein cleaving enzyme (BACE-1), a key factor in AD, has shown optimistic results. It has been hypothesized that small molecules could inhibit the enzymatic activity of BACE-1 through its exosites and active catalytic site. By using Computer-Aided Drug Design, we aim to identify small-molecule modulators of BACE-1. First, we conducted literature reviews on small-molecule BACE-1 inhibitors. Then, we will identify high-affinity-selective BACE-1 inhibitors using VIDA-OEDocking-FRED programs via molecular docking virtual screening of commercially available drug-like molecules databases against the available BACE-1 structure. Our best candidate compounds will be tested experimentally. The successful identification of selective BACE-1 inhibitors could not only contribute to AD therapy but also potentially serve as a model for targeting other neurodegenerative diseases.

Student Presenters: Ashanti Malcolm

Faculty Mentor: Prof. Faisal Khan

Abstract: Whether it is the loss of a loved one or distraction from not completing a goal, stress is a part of our everyday lives. This project will explore the relationship between stress, gut health, and mental well-being. Research has shown that chronic stress can negatively impact the gut microbiome, leading to digestive issues, fatigue, and increased anxiety, creating a cycle that affects both physical and mental health. The project focuses on educating students about the gut-brain connection, highlighting how stress can disrupt gut health and, in turn, exacerbate mental health challenges like anxiety and depression. Through workshops, informative materials, and peer-led discussions, the project will provide practical tools for managing stress, including mindfulness techniques, balanced nutrition, and strategies for improving gut health. The goal is to break the cycle of stress and poor gut health by promoting healthier lifestyle choices, such as proper diet, exercise, and stress reduction practices. By raising awareness of this connection, this project aims to help students take a holistic approach to improving both their physical and mental well-being.

Student Presenter: Christlynn Rodriguez

Faculty Mentor: Prof. Debasish Roy

Title: Identification & Characterization of High Resistant Bacterial Strain Around Five Boroughs of NYC

Abstract: Severe microbial resistance over available drugs become a challenging task for Biomedical Scientist in present time. Also, characterization of drug-resistant microbial pathogenesis is critical to prevent future pandemic. Therefore, in this research study, we have identified different Antimicrobial Resistant (AMR) bacterial strains collected mainly from the South Bronx and other boroughs of NYC. Initially, Antibiotic Resistance Microbes (ARM) are collecting from those areas and screen against high concentration of various natural antibiotics. Then we study their Morphology, Minimum Inhibitory Concentration (MIC) and Genetics by applying the latest techniques of microbiology/molecular biology, e.g., Plate count, DNA/RNA isolation, Gel electrophoresis, PCR and Western blot analysis, ELISA etc., and compare them through Bioinformatics tools (e.g., DNA Fingerprinting, DNA Barcoding etc.).

Student Presenters: Christopher Ventura

Faculty Mentor: Prof. Faisal Khan

Title: How Smoking Affects Our Lives

Abstract: This project explores the detrimental effects of smoking on lung health, emphasizing that no form of smoking—whether cigarettes, vapes, or hookah—is risk-free. Despite marketing claims, many "nicotine-free" products still contain harmful chemicals that damage the lungs.

Hookah smoke, often mislabeled as "water vapor," carries toxins such as carbon monoxide and heavy metals, contributing to respiratory and cardiovascular diseases. Secondhand smoke exposure is equally hazardous, with children and non-smokers being particularly vulnerable. Smoking inflames the airways, reducing lung function and increasing the risk of chronic conditions like COPD, bronchitis, and lung cancer. Additionally, smoking has psychological effects, exacerbating anxiety and depression despite its temporary stress-relief appeal. This project highlights the urgency of smoking cessation and increased public awareness to mitigate these severe health risks. The findings reinforce the importance of educating individuals about the true dangers of smoking and secondhand exposure, advocating for a smoke-free lifestyle.

Student Presenter: Deonte Barimah

Faculty Mentor: Prof. Marcia Ribeiro

Title: Essential Oils Effectiveness Against Fungal Spoilage on Fruits

Abstract: Fungal decay is one of the most significant causes of postharvest losses of many fruits. Plant essential oil (EOs) research has increased significantly due to their natural properties. EOs contain four of the most active antimicrobial compounds: terpenes, terpenoids, phenylpropene, and other compounds. These compounds, can inhibit the growth of fungi and prevent pathogen infection in fruits. This project consists of two experiments, which will verify whether essential oils prolong quality and longevity and will test the effectiveness of essential oils against fungal spoilage.

Student Presenters: Elsa Holguin & Jade Blando

Faculty Mentors: Prof. Anna Ivanova

Title: The Study of the Effect of Lemon Balm on Water Contaminated with Copper

Abstract: Water pollution caused by heavy metals is a serious environmental problem. Phytoremediation is an eco-friendly, cost effective and natural way to clean water contaminated with heavy metals. The results of our previous research have shown the potential effectiveness of Lemon Balm (LB) in treating copper-contaminated water. Thus, the objective of this project is to study the effectiveness of Lemon Balm in reducing the concentration of copper in water samples under varying pH conditions. The plant's effectiveness is tested at different stages of its growth development. Specifically, leaves and stems of LB are tested for their effectiveness in reducing concentration of copper in contaminated water samples. We hypothesize that change in pH affects the ability of the plant in reducing concentration of copper in water. The spectrophotometric method is used to measure the concentration of copper in the samples before and after the treatment of the samples with the experimental plant.

Student Presenter: Erika Mata

Faculty Mentor: Prof. Jiang & Prof. Yoel Rodriguez

Title: One of the Noisiest Subway Stop in New York City/Work in The Subway System

Abstract: In this project, I conducted a series of environmental noise measurements in decibels (dB) at the Union Square Southbound #4, #5, and #6 train platform. Data was collected at various times and days to capture a comprehensive representation of noise levels in the subway ecosystem. Using the experimental data gathered through the Decibel iPhone application, the study enabled a comparative analysis of sound intensity between weekdays and weekends across four distinct data sets. The findings provide valuable insights into noise pollution patterns within the MTA subway system. My research lays the groundwork for proposing updates needed for policies and recommended standards regarding permissible decibel levels in subway environments. The results aim to design future initiatives to improve noise regulation and enhance the overall commuter experience in urban transit systems. Future Projections: Moving forward, this study could be expanded to include additional subway lines, platforms, and times of day to create a more comprehensive noise profile of the MTA system. Long-term monitoring could also assess the effectiveness of implemented noise reduction strategies. Furthermore, integrating advanced noise measurement tools and machine learning algorithms could enable real-time noise analysis and predictive modeling, helping to proactively address noise pollution and promote sustainable urban transit.

Student Presenters: Evan Brown

Faculty Mentor: Prof. Nelson Nunez-Rodriguez

Title: Ethical Integration of AI Tools in Science Courses for Non-Science Majors

Abstract: This project investigates the ethical integration of artificial intelligence (AI) into science courses for non-science majors, focusing on online asynchronous activities that foster scientific reasoning skills. Building on previous work with high school teachers and college faculty, the proposal explores how AI is transforming classroom environments and how it can be utilized to teach inquiry skills and support scientific thinking. The project aims to create a set of logic-driven prompts designed to be applied in science courses, with a focus on disciplinary knowledge. This set of strategies will be valuable for fostering critical thinking and promoting ethical AI usage in educational settings.

Student Presenter: Dainma Martinez & Franyeli Contreras

Faculty Mentor: Prof. Yoel Rodriguez

Title: Galileo's Inclined Plane Experiment

Abstract: Galileo Galilei, a pioneering figure in the field of physics, conducted experiments that significantly advanced our understanding of motion. One of his most influential experiments involved the study of motion along an inclined plane. This experiment was crucial in the development of the laws of motion and the concept of acceleration due to gravity. In this study, we aimed to determine the linear acceleration of a marble and observe a direct proportionality between the acceleration and the sine of the angle of the inclined plane, and the acceleration due to gravity (g) at our location in New York City, using an inclined plane to simulate the effects of gravity on a marble. Data were collected by measuring the time it took a marble to traverse inclined planes set at varying angles, enabling calculation of its acceleration. Two scenarios—purely translational motion and combined translational-rotational motion—were analyzed, using the relationships $a = g \sin(\alpha)$ [translation] and $a = (5/7) g \sin(\alpha)$ [rotation + translation]. The results showed that increasing the incline's angle consistently increased the marble's acceleration, confirming the hypothesis that a larger component of gravitational force acts along steeper planes. The calculated average acceleration due to gravity (g) using the rotational-translational model was $8.17 \pm 0.58 \text{ m/s}^2$ (16.64% error), whereas the average acceleration due to gravity (g) using the translational model was $11.44 \pm 0.58 \text{ m/s}^2$ (16.72% error). From these findings, the local gravitational acceleration in New York City was estimated. Overall, the study reaffirms Galileo's principles on inclined planes and offers a hands-on demonstration of how gravitational force and rotational effects influence rolling objects.

Student Presenter: Jannis Tyson

Faculty Mentor: Prof. Biao Jiang

Title: The Sound of the City: Quantifying Noise and Vibrations in Urban Transit Hubs

Abstract: Many studies have focused on noise pollution in and around subway stations, as well as the harmful effects that these emissions have on residents. Many health issues like stress-related diseases, such as cardiovascular diseases, and negative effects of mental health like insomnia, have been linked to noise pollution. We hypothesized that most of the noise pollution stems from the departure and arrival of train stations. This study focused primarily on the MTA in the Westchester Square Station, located in the Bronx, where we analyzed 300 minutes of sound data and an additional 60 minutes of accelerometer data. We determined that our data correlates the arrival and departure of trains with increased noise levels in the immediate area around the transit hub.

Student Presenters: Jay Alvarez, Gloria Amankwah, Jonathan Luna, Maya Jean, & Jorge Sanz

Faculty Mentor: Prof. Lauren Wolf

Title: Examining Explicit Bias in the Black Box of AI

Abstract: AI decision-making has a harmful impact on the lives of marginalized communities across the globe. In “Examining the Implicit Bias in the Black Box of AI,” we focused not on the

issue of data being misinterpreted, but rather on bias in data collection and flawed automation. For this portion of the research, we explored the different groups affected by bias and examine how people have been negatively impacted in various ways. Additionally, we considered potential ways to mitigate these biases, such as new training programs, counter-bias algorithms, and collaboration with affected communities to reduce the negative impact.

Student Presenters: Joshua Wiggan & Jeffrey Hidalgo

Faculty Mentor: Prof. Silvia Reyes

Title: Being a First Year Experience Mentor Navigator at Hostos

Abstract: Many new students might have a lot of questions about how to go about achieving their academic, career, and personal goals. As part of a team of First Year Mentors at Hostos, we aim to help students clarify their educational goals by guiding them in the direction and providing them with the information and help they need. We have found that providing the right support at the right time is important to help students stay motivated, overcome challenges, and do well in classes.

Student Presenters: Joel Javier

Faculty Mentor: Prof. Yoel Rodriguez

Title: Computational Study of the Belousov-Zhabotinskii Reaction

Abstract: Oscillatory and chaotic behavior and fractal structure are exhibited in many biological processes, and their modeling plays a key role in the understanding of these complex systems. One example of a process exhibiting both oscillatory and chaotic behavior is the Belousov-Zhabotinskii (BZ) reaction, an important example of non-equilibrium thermodynamics. Depending on initial parameters, the BZ reaction may oscillate periodically or chaotically, making it ideal to study complexity using computational biophysics. Fractals, which are self-similar structures that repeat at different scales, and are characterized by having non-integer dimensions, are present in non-equilibrium thermodynamic processes. Based on the importance of oscillatory and chaotic behavior and fractals, this research aims to do a literature review on these phenomena and to get acquainted with non-equilibrium thermodynamics, and to mathematically reproduce the BZ reaction. Toward this end, we have first done a literature review on oscillatory and chaotic behavior and fractals using Google Scholar and PubMed database. Secondly, we will use differential equations in MATLAB to model the BZ reaction, changing input parameters such as reagent concentrations to study the impact of different initial parameters on later states of the reaction. This study may help to better understand other biological oscillatory processes, such as circadian rhythms, heart rate, and membrane potentials.

Student Presenters: Jean Carlos Garcia & Mitu Khanom (*CUNY Explorers*)

Faculty Mentor: Prof. Joey Snavely

Title: Promoting College Readiness through CUNY Explorers: A Partnership between CUNY and NYCPS

Abstract: Under the Mayor's College Access for All Initiatives, CUNY's Office of K-16 Initiatives has partnered with the New York City Public School (NYCPS) to implement the CUNY Explorers program. This initiative ensures that every seventh-grade through ninth-grade student is exposed to a college-going culture and has the opportunity to visit a college campus at least once. The program's core message is that every student can go to college, afford college, and take steps now to become college ready.

Why CUNY Explorers? Both middle and high school are critical periods in a student's life for setting the foundation for success in college and beyond. By fostering a college identity at this developmental stage and providing a campus experience that promotes a college-going mindset, students and their families internalize the belief that college is both necessary and achievable.

Student Presenter: LaylaLee Morrison

Faculty Mentor: Prof. Faisal Khan

Title: Food for Fuel

Abstract: Metabolism is the process by which the body converts the substances we consume into energy and uses them to regulate our biological functions. This process plays a vital role in maintaining a healthy and productive lifestyle. My hypothesis suggests that healthier food choices positively support your metabolism by allowing your body to digest food efficiently and convert it into energy and nutrients. In contrast, processed, sugary, and fatty foods can slow down your metabolism, resulting in low-energy levels and an unhealthy lifestyle, which may lead to diseases such as diabetes and obesity. To come to this conclusion, I've researched existing studies and articles that explore the relationship between food and a person's metabolic system and overall health. My presentation showcases how food choices impact metabolism and overall health.

Student Presenters: Leena Hassan (*Early College: HERO*)

Faculty Mentor: Prof. Megan Mullaney

Title: Write a Letter to Your Future Self

Abstract: I want to be a part of the symposium not only because it is a great resume builder. I want to do it because it will be fun to work with my peers and present things that connect with our goals and reflect on the past. It will be a way for me to express myself to people I may see in 4 years! It is a great thing to share with others and maybe inspire them to do the same. All in

all, I think this will be a great experience for me as I am just starting high school and want to expose myself to make all the opportunities I can. What's stopping me from making a poem about my future self that will hopefully inspire others that listen or read it?

Student Presenters: Mahammadou Camara

Faculty Mentor: Prof. Reginald Dorcely

Title: Nanotechnology in Super Capacitors and Energy Storage

Abstract: Nanotechnology has revolutionized energy storage by enhancing the performance of supercapacitors, which offer high power density, rapid charge-discharge cycles, and long lifespan compared to conventional batteries. The integration of nanomaterials, such as graphene, carbon nanotubes (CNTs), and metal oxides, significantly improves electrode surface area, conductivity, and electrochemical stability. These advancements enable the development of next-generation supercapacitors for applications in portable electronics, electric vehicles, and renewable energy storage. This study explores the role of nanomaterials in improving supercapacitor efficiency, current challenges in large-scale implementation, and future directions for high-performance energy storage systems.

Student Presenters: Marquis Santiago

Faculty Mentor: Prof. Reginald Dorcely

Title: From Conversation to Healthcare: Expanding the Potential of Large Language Models

Abstract: Large Language Models (LLMs) significantly advance artificial intelligence (AI), empowering machines to comprehend and generate human-like text. This study investigates the potential applications of LLMs in everyday life, emphasizing the enhancement of their conversational abilities to make AI interactions more indistinguishable from human communication. The primary goal is to refine these models by integrating various AI systems and improving their linguistic accuracy, contextual understanding, and responsiveness. Furthermore, this research explores the potential role of LLMs in healthcare, particularly in assisting patients and families in navigating hospital policies, managing patient information, and facilitating personalized health planning. By continuously advancing LLMs, AI can improve human life rather than hinder it, delivering intelligent assistance in diverse fields. This vision aligns with developing AI systems similar to Jarvis from Iron Man, targeting seamless human-computer interaction. Future efforts will concentrate on iterative model training, optimization, and integration to enhance AI's capabilities in real-world applications.

Student Presenters: Marilin Rodriguez-MartinezJasmin Sanchez, & Miram Fidelis

Faculty Mentor: Prof. Anna Ivanova

Title: Identification of Herbaceous Aromatic Plants as Phytotherapy for ADHD

Abstract: Attention Deficit Hyperactivity Disorder (ADHD) is a neurodevelopmental disorder characterized by symptoms such as inattention, hyperactivity, impulsivity, difficulty focusing. The underlying cause of ADHD is believed to involve dysfunction in the dopaminergic system, which plays a crucial role in regulating attention, memory, motivation, and other cognitive functions. The treatment of ADHD often involves medications that increase dopamine levels in the brain. Phytotherapy, treatment of medical conditions using plants, is considered as an alternative approach. Our objective is to conduct literature survey to create a library of the herbaceous aromatic plants (HAPs) reported to positively affect dopamine synthesis and/or transmission, as such plants could potentially serve as therapeutics for ADHD. Our long-term goal is to use the library in a machine learning modeling to enable identification of novel (not yet reported) HAPs with therapeutic properties for ADHD treatment. We hypothesize that HAPs with potential to treat ADHD share common chemical compounds.

Student Presenters: Minji Nam

Faculty Mentor: Prof. Antonios Varelas

Title: Understanding the STEM Student Experience at Hostos Community College Through an Intersectional Lens

Abstract: This research project is aimed at understanding the undergraduate STEM student experience at Hostos Community College through an Intersectional lens. Semi-structured interviews were conducted to understand the perceptions, motivations, and barriers to enrollment, retention, and graduation in STEM fields for Hostos students. The Intersectional lens considers an aggregate of social factors, such as race, gender, and sexuality, that may integrate towards an experience that is singular to that individual. Analysis of interviews via the Listening Guide Method reveals how these factors contribute to the undergraduate experience, and perhaps uncover new obstacles or advantages.

Student Presenters: Mohamed Bachir Cisse

Faculty Mentor: Prof. Tanvir Prince

Title: Exploring the Mathematics of JPEG Compression and its Impact on Singal Color and Multicolor

Abstract: Data compression is essential in computer science, reducing large file sizes for easier storage and transmission. The Joint Photographic Experts Group (JPEG) is a widely used method for compressing digital images. This study has two parts. First, I will examine the mathematical principles of JPEG compression, focusing on transformation, quantization, and encoding. With my mentor's help, I will understand how these processes reduce file size while maintaining image quality. In the second part, I will conduct experiments to study JPEG compression across

various image categories. Possible categories include “Single Color,” “Multicolor,” “Day,” or “Night,” among others. I will analyze how JPEG compression impacts the chosen category. This research will enhance my technical skills, teamwork, communication, and time management. I will also develop my presentation skills by sharing findings and may present at conferences. Additionally, I will improve my abilities in research, data analysis, and scientific writing, preparing me for future academic and professional growth.

Student Presenters: Nafisa Tabassum (*Early College: HERO*)

Faculty Mentor: Prof. Fiordaliza Ippolito

Abstract: HERO from the Bronx, young poetry voices. Project is a collaborative project with professor Ippolito, my Spanish professor. The poems reflect cultural, social, personal and historical aspects. Each poem inspires creativity and encourages the literary writing of young poets with diverse narrative voices. It provides a platform for emerging young voices to be heard and celebrated.

Student Presenters: Rahimul Karim & Rosa Paredes

Faculty Mentor: Prof. Debasish Roy

Title: Role of NSAIDs in preventing AMR Infection

Abstract: Microbial resistance over available drugs becomes a challenging task for the Biomedical Scientist in present time. Also, knowledge of drug-resistant microbial pathogenesis is critical to prevent a future pandemic. Therefore, in this program, we have played a pivotal role in developing a roadmap for new drug development against antimicrobial resistance (AMR) strains. Different Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) will be tested against AMR bacterial strains collected mainly from south Bronx and other boroughs of NYC. Initially, Antibiotic Resistance microbes (ARM) are collected from those areas and screened against high concentration of natural antibiotics. Then we study their Minimum Inhibitory Concentration (MIC) against NSAIDs Sulindac and Celecoxib by applying the latest techniques of microbiology/molecular biology, e.g., Plate count, DNA/RNA isolation, Gel electrophoresis, PCR and Western blot analysis, ELISA etc., and compare them through Bioinformatics tools (e.g., DNA Fingerprinting, DNA Barcoding etc.). This training cum research program will help the students to develop the knowledge and skill required in the present-day market demand and become a ready work force after completion of their research.

Student Presenters: Anthony Eduardo Cruz Hernandez

Faculty Mentors: Prof. Nieves Angulo, Prof. Moise Koffi, and Prof. Reginald Dorcelly

Title: Predicting Retention and Graduation Rates in Mathematics and Computer Science for Undergraduate Students Based on the Variability in Their GPAs

Abstract: Post-secondary institutions have struggled to retain and graduate low-income STEM students. This study examined Mathematics and Computer Science majors at a Hispanic Serving Institution (HSI), comparing students in the Mathematics and Computer Science Scholars (MACSS) program—who received scholarships, tutoring, and technology support—to non-MACSS students. Using the coefficient of variation (CV) to assess GPA consistency, data from 180 students (fall 2022–fall 2023) showed MACSS scholars had lower CVs (3–7% for math, 10–17% for computer science) than non-MACSS students (26–32% for math, 28–36% for computer science). MACSS scholars also had higher retention (93.6%) and graduation (76.2%) rates compared to the institution's overall retention (58%) and graduation (20%) rates. These findings suggested that academic support improved GPA stability, predicting better student outcomes. Future research would survey students to explore their perceptions of academic support and financial assistance on GPA variability.

Student Presenters: Susan Hu

Faculty Mentor: Prof. Dr. Vladimir Ovtcharenko

Title: A Collection of Ground Spiders at the AMNH

Abstract: The American Museum of Natural History houses the largest collection of spiders in the world. An important part of the research we do there is to identify and catalogue spiders collected in the field from different countries and borrowed from other museums. Our job is to organize each specimen's labels and to take corresponding photos for identification. In order to identify whether each specimen is known or a new species, we photograph the whole specimen, its eyes, spinnerets, and genitals. This categorization will expand our current understanding of ground spiders and will be made available for any scientist to use.

Student Presenters: Salih Rahman, Keyla Rodriguez, Crystal Carvajal, Mabintou Gassama, Shelby McGill, & Kimberlyn Mateo Villegas

Faculty Mentor: Prof. Michelle Cheikin

Title: NYC TIME PERIOD CONCEPT MAP

Abstract: First Year Seminar students designed concept maps that indicated a period in New York City history. They reviewed their unit lectures that provided timelines of the history of the City College of New York, along with United States Presidents and New York State Governors, New York City's Infrastructure, Immigration, Architecture, and Art. Using color pencils or digital software, students designated shapes to highlight one fact from the course material that occurred during a year, or five-year period, and different shapes to point out relational concepts between two or three facts. Their concept maps show a variety of connected as well

as disassociated socio-economic and artistic trends occurring in New York City at one point in time.

Concurrent Presentations

C-Building Room 391, 3rd FL, 2:00-3:00

Moderator: Kristen Tran

Student Presenters: Albert Alejandro Rufino Taveras

Faculty Mentor: Prof. J.C Williams

Title: Issue on AfroLatinidad: Theory, Research, and Practice

Abstract: In the recent years, there have been an increased acknowledgment of the racial diversity among Latinx in the US and Latin America including the recognition of AfroLatinxs. AfroLatinxs are likely to experience oppression within the non-Latinx and Latinx community due to their characteristics such as skin color, facial and hair texture. In this article we will review an overview of the events leading to the description of the historical and contemporary racial landscape in the US and Latin America. It was the first-ever Afrolatinx special interest group (2018) at the National Latinx psychology association (NLPA). To date, most of the research with AfroLatinx populations has been carried out in the areas of public health and social work. In conclusion AfroLatinx experience higher levels of life psychological stressors such as financial and racial discrimination than other Latinx population. Keywords: Afrolatinx, Psychology, Research, Discrimination, Diversity.

Student Presenters: Ayomiposi Dorcas Ogunleye

Faculty Mentor: Prof. Gail August

Title: Nigeria

Abstract: English has been made the official language of Nigeria, a former British colony, which has an effect on its governance, educational system, and economic prospects. Social inequity, linguistic assimilation, and the devaluation of indigenous languages have resulted from this choice. While those from lower-income and rural locations have fewer chances, individuals who speak English have better access to high-paying jobs and high-quality education. Nigeria's linguistic landscape is also influenced by religious variations; Islamic schools place more emphasis on Arabic, while Christian missionary schools encourage English instruction, resulting in regional variances. This paper examines Nigeria's historical and post-colonial language policies, their effects on social mobility, work, and education, and possible policy changes to

encourage linguistic inclusiveness while striking a balance between the cultural significance of indigenous languages and the usefulness of English.

English has become the official language in Nigeria, promoting linguistic assimilationism over linguistic variety. This decision has devalued indigenous languages and created a cultural gap for many Nigerians who do not speak English. English language proficiency is often required for work, government, and education, worsening social inequality.

Student Presenter: Nahomy Yaneri Ramos Arriola

Faculty Mentor: Prof. Gail August

Title: Garifuna Language

Abstract: The Garifuna language is the result of the mixture of several languages and cultures, including Arawak, Carib, French, English and Spanish. It is spoken by the Garifuna people, an Afro-indigenous group that settled on the Atlantic coast of Central America. The Garifuna language is becoming extinct due to emigration. There are no sources of work in the communities and because of this they must go to the cities to work to support the economy of the home. At the same time, young people also leave the communities to study and prepare themselves at an educational level. Therefore, when they leave the communities, in most cases the language is no longer practiced and is often forgotten in some cases and in other cases, knowledge of the language is no longer transmitted to the next generation.

Student Presenter: Ney Sebastian Patin III

Faculty Mentor: Prof. Saadia Lgarch

Title: Web 3.0 - Semantic Web

Abstract: The web has evolved from Web 1.0, with static content, to Web 2.0, driven by user interaction, and now to the Semantic Web (Web 3.0), where data is interconnected and machine-readable. This work explores key Semantic Web technologies, including RDF, OWL, and SPARQL, which enable more meaningful and efficient data connections. The Semantic Web aims to enhance structured data retrieval and improve information sharing. It also addresses challenges that hinder its full adoption. Overall, this study provides a deep understanding of the web's evolution, current limitations, and the potential of the Semantic Web to create a smarter, more connected online environment.

Student Presenters: Rasheed Larry

Faculty Mentor: Prof. Damaris-Lois Y Lang

Title: Advancing Societal Equity Through Neurobiology of Behavior

Abstract: Misconceptions surrounding biological variation, particularly those rooted in biological essentialism, continue to influence societal perceptions of race, color, and ethnicity. The broader question is, what are the underlying beliefs and misconceptions about biological variation that contribute to misunderstandings of human diversity? The specific question of interest is how misconceptions about biological essentialism manifest in public discussions of race, color, and ethnicity and what patterns can be identified when comparing new observational data with previously collected data. This study employs an ethnographic approach to investigate how these misconceptions manifest in public discourse through observations conducted at in-person community events hosted by P-CoC Inc. The research captures explicit statements, implicit assumptions, and non-verbal cues that reflect underlying beliefs about human diversity.

Student Presenter: Rosanna Ramos Rivas

Faculty Mentor: Prof. Emmanuel A. Velayos Larrabure

Title: Poverty as a Racial Equalizer: The Origins of Racelessness in the Dominican Republic

Abstract: This paper explores the colonial economic origins of the national discourse on the lack of racial differences in the Dominican Republic. The idea that the Dominican Republic is a raceless nation has been used in different contexts to repress blackness and the Haitian heritage in the country. This presentation investigates the economic conditions of colonial Santo Domingo that made such a raceless imaginary possible: It explores the role of poverty as a racial equalizer on the Hispanic side of the island. First, I analyze how the collapse of the agricultural system in Santo Domingo led to the fall of its slaveholding economy. Then, I analyze how this economic collapse functioned as a racial equalizer with the rise of the demographics of free people of color. I finally reflect on how this racial equalizer had an emancipatory and abolitionist potential in the 18th century, which should not be confused with the contemporary fiction of racelessness in the Dominican Republic.

Concurrent Presentations

C-Building Room 561, 5th FL, 2:00-3:00

Moderator: Nelson Nunez-Rodriguez

Student Presenter: Kiara Davis (*Early College: Hostos-Lincoln Academy*)

Faculty Mentor: Prof. Hee Chul Lee

Title: Melanin

Abstract: The project is a presentation on why some people have darker or lighter skin tones. It is due to the amount of melanocytes your body produces. I will be discussing what exactly a pigment is and how you get it. I will also speak about the possible effects of having lighter or darker skin tones. One of them is that skin cancer is more common in people with lighter skin tones. This is because melanin protects your skin from damage from UV rays of light that can penetrate the skin. My goal in presenting this topic is to make people more aware of the effects of the sun and why it is important to protect your skin. While all of that is important, my main goal is to inform people on why our skin is the way it is.

Student Presenter: Adrian Rhoden

Faculty Mentor: Prof. J.C Williams

Title: Psychology of Aesthetics

Abstract: Social media's influence on beauty standards has significant psychological effects when comparing ourselves to others. Beyond appearance, beauty is also shaped by morality. Good personality traits enhance attractiveness while negative traits lower it. Art similarly is more than an aesthetic or intellectual pursuit, it is an emotional necessity that guides our experiences. It shapes emotions, perceptions and helps to develop deeper reflections contributing to both personal growth and knowledge. Research in psychology and neuroscience highlights art's ability to stretch understandings by enhancing emotional and cognitive insights. Aesthetic appreciation is not permanently fixed, but is constantly evolving, shaped by our cognitive development, personal experiences, and cultural exposure. Recognizing the connection between beauty, morality, and art offers a deeper understanding of their role in shaping individual well-being and understanding societal values. As emotional and aesthetic experiences are often overlooked, acknowledging their importance can lead to a greater appreciation of human perception.

Student Presenter: Fouad Oukpedjo

Faculty Mentor: Prof. J. C. Williams

Title: Media Psychology

Abstract: Articles in general provide insight on the role of social media (internet, MOOC-type video, video game, face book, TicTok...) in emotional regulation processes, psychological need fulfillment, social connection, parenting, and learning. This collection of research also contributes to the theory of our understanding of how entertainment media experiences can influence social and psychological well-being of people. The goal of the research is to gain insight on the contributions of demographic and sociological factors, and media usage to verbal aggressiveness. To answer these questions, researchers used observation technique,

questionnaire (survey) to examine the responses of hypotheses and theories. Results of the study showed that, sex, neighborhood, peers, parents, religion, and rap music listening were significant predictors of verbal aggression. For instance, the social learning process illustrates why males are socialized to be more dominant and aggressive in their affect display and sex-role expectation.

Student Presenter: Karla Lemus

Faculty Mentor: Prof. J. C. Williams

Title: Transpersonal Psychology in Education

Abstract Transpersonal psychology in education is a branch of psychology that explores the spiritual well-being of students. Founded by Abraham Maslow and Carl Rogers in the early 1960's, transpersonal psychology in education provides extracurricular activities like these: yoga, dance therapy, crochet, art therapy, and meditation. Some researchers have discovered that incorporating yoga and meditation into a student's daily schedule can improve cognitive function and reduce stress. This can result in improved concentration, focus, and eventually improved school grades. Children and adults of any level of education can be part of these activities, allowing students to stretch their bodies with yoga poses during the day, and utilizing breathing techniques and mindfulness meditation can create calmer, more polite, and less aggressive students. In addition to wellbeing benefits, yoga is a holistic practice that combines physical postures, improved brain function, concentration, mood, and stress reduction for students.

Key words: yoga, transpersonal psychology, meditation, cognitive, education.

Student Presenter: Shonobia Johnson

Faculty Mentor: Prof. Professor J. C. Williams

Title: Enhanced Memory in Older Adults Influenced by Physical Fitness

Abstract: The purpose of this research project is to raise and spread awareness to all people on how physical fitness is significant to older adult development for the ages 60 and above. An analysis of the correlation between physical exercise and memory in older adults is highlighted throughout this research project. In the results of this project, it was found that improved recollection was caused by multiple types of fitness practices. In addition, this analysis demonstrates different ways older adults can reduce and prevent memory loss. It is critical to begin or to maintain a healthy habit of including physical fitness in one's daily routine, so that older adults can have an enhanced and adequate memory. This research project contributes to learning in psychology because it examines the life span of mental processes and behaviors experienced by older adults.

Keywords: exercise, older adult development, physical fitness, psychology, recollection

Concurrent Presentations

C-building Hostos Research Center, 1st FL, 2:00-3:00

Moderator: Lisanette Rosario

Student Presenter: Shanella Foster (*Early College: HERO*)

Faculty Mentor: Prof. Megan Mullaney

Title: Developing Confidence

Abstract: The project I would like to complete is creating a visual explaining my life motto. My ultimate objective of this project is to inform others on the importance of words of affirmations that motivate you as you keep working towards your life goal. I believe that my visual and my explanation of my life motto will help others realize the true meaning of being confident in what you want to achieve and that having confidence will get you to a point in life where you feel completely accomplished. By the end of this project I wish that my audience will understand the life motto that I have created for myself and further inspire them to create their own. I will provide a deeper understanding of the importance of confidence, especially as we continue to complete our years in high school and hopefully college.

Student Presenter: Afia Amponsah (*Early College: HERO*)

Faculty Mentor: Prof. Megan Mullaney

Title: My Road to the Future

Abstract: I would like to present a poem as a letter to my future self to open at graduation. The goal is to write an inspirational reflection piece that I will look on in the future to give me motivation. I want my audience to take away the idea that not everyone has it all figured out and to plan as life goes on. This poem will help me reflect and give me motivation to work harder as I continue in my high school career. I want to be a lawyer, but I don't know if I still will in the future, so this poem will also include questions to myself about my future profession. I would also like to know if the friends I have made this freshman year have followed me to graduation, and if my family is proud of the decisions I have made over the years.

Student Presenter: Karen Morel

Faculty Mentor: Prof. Nancy Genova

Title: The United Federation of Teachers

Abstract: My Symposium will focus on the research of The United Federation of Teachers; the following information is based on my understanding of my search and the articles "About the UFT," "Health Benefits. United Federation of Teachers," and "Why should I join the UFT? What is the benefit of joining?" Based on my understanding, The (UFT) is a professional union committed to promoting fairness, democracy, economic opportunities; and quality public education; healthcare; and services for students, families, and communities. The UFT's history is rich and significant, with its roots tracing back to other teachers' unions in New York City, such as the Teachers Union, which was established in 1916 but struggled to find broad support. Many of its founding members were pacifists or socialists, resulting in conflicts with conservative newspapers and groups. The Teacher's Guild was also created in 1935 by seasoned progressive educators who broke away from the Teachers Union. This more aggressive union later joined forces with the Teachers Guild to make the UFT in 1960. The United Federation of Teachers (UFT) offers its members an array of advantages, such as extensive health insurance, a solid pension plan, opportunities for professional growth, vigorous support for better working conditions, exclusive extended childcare leave options, and a specialized mental health support system designed for educators. These resources enable them to tackle personal issues while continuing their teaching responsibilities to safeguard and improve the employment experience of teachers and staff in New York City public schools.

Student Presenter: Arianna Guzman (*Early College: HERO*)

Faculty Mentor: Prof. Megan Mullaney

Title: Early College & Me

Abstract: The project that I am presenting at the symposium is about me, who I am as a person and a peek into my future. I will be using a creative writing piece to talk upon my career and personal goals. I will be addressing these goals through the lens of the Early College Initiative—how will early college classes will be able to help me accomplish my goals; what I can learn from the process; and how the early college experience affects me. It has made me more resilient, as a scholar and a person, which helps me be able to adapt and overcome challenges that I wasn't able to do before and grow from it.

Student Presenter: Krislaine Burton (*Early College: HERO*)

Faculty Mentor: Prof. Megan Mullaney

Title: Krislaine, Aspiring Psychologist

Abstract: For my part in the symposium, I would like to discuss my culture and my family, as they play a significant role in shaping who I am. My parents have been instrumental in guiding my decisions and influencing my values. Following this, I'll dive into the topic of psychology, the career I wish to pursue and how I got to that conclusion. Finally, I will discuss how early college

classes are helping me work towards this goal, providing me with valuable knowledge and skills that will help lead me to my preferred career path. These courses are crucial parts of my journey allowing me to get a head start in my chosen field and better preparing me for the challenges that lie ahead in both my academic and professional career.

Concurrent Presentations

C-Building Room 560, 5th FL, 2:00-3:00

Moderator: Alison Lowenstein

Student Presenter: Fatoumatou Haidara (*Early College: HERO*)

Faculty Mentor: Prof. Lakisha Brooks

Title: From Doubt to Confidence

Abstract: This presentation reflects on the question, "What is something you've done in your high school experience that you never thought you would be able to do?" by sharing my personal journey of taking dual enrollment classes at Hostos Community College and participating in internships. At first, I didn't think I was capable of balancing college courses while still in high school, but these experiences have opened doors and changed the way I view my future. Through this project, I aim to show how pushing past self-doubt and taking on new challenges can lead to growth and new opportunities. By sharing my story, I hope to motivate other students to take chances and pursue things they might not think they can do. Whether it's taking college classes or gaining real-world experience, stepping out of your comfort zone can have a huge impact on your future.

Student Presenter: Fabian Powell & Nathan Ellis

Faculty Mentor: Prof. J.C. Williams

Title: Ghost of Meritocracy Showcase

Abstract: Ghost of Meritocracy is a story-driven, point-and-click adventure game developed by Other Possible Games, which is a studio comprised of game design professors, students, and alumni of Hostos Community College in collaboration with Ideas42. With a majority of its development being over the summer and fall semester of 2024, the game follows The Ghost, a manifestation of the concept of meritocracy, as it enters the minds of office workers. Through engaging gameplay, players attempt to convince workers that success is solely based on effort, only to encounter systemic barriers such as discrimination, unequal opportunities, and more. By navigating these challenges, the game encourages players to critically examine the myth of

meritocracy and the real-world obstacles that shape professional success. Ghost of Meritocracy aims to spark reflection on the social narratives that influence our understanding of work, fairness, and achievement.

Student Presenter: Jasmine Pradier

Faculty Mentor: Prof. Alison Lowenstein-Isaacs

Title: Between the Stars and Heaven, I choose You

Abstract: Demi-god Warzen wants to give a gift to Love Goddess Evangeline on their anniversary. He fidgets and worries, for she has everything she could ever want. But he wants to give her something she doesn't have. Warzen seeks advice from Evangeline's best friend, Dawn the Mother Nature. For Mother Nature has seen humanity since the beginning of time, so she would know their behaviors. But Dawn has been with Evangeline through thick and thin, so she must know what she craves the most. Dawn suggests the greatest gift humanity can offer for one another—Commitment. So Warzen sets up a scenery where they first meet in Central Park. He proposes to Evangeline, giving his full commitment to her to which she gleefully accepts.

Student Presenter: Sara Gonzalez

Faculty Mentor: Prof. Alison Lowenstein-Isaacs

Title: The Struggle To Fight For A Home

Abstract: “The Struggle to Fight for a Home” is a creative non-fiction essay focusing on young parents trying to find a home for their family. From navigating the shelter system to the search for affordable housing, this piece addresses the reality of the current housing crisis. The personal account shows the struggles and ultimately, the success of finding a home, where the author has lived for over a decade.

Concurrent Presentations

C-Building Room 560, 5th FL, 3:00-4:00

Moderator: Sarah Hoiland

Student Presenter: Alan Guzman Hierro

Faculty Mentor: Prof. J. C. Williams

Title: LATINX PSYCHOLOGY

Abstract: Latino psychology integrates cultural resilience into mainstream psychotherapy, emphasizing ethnic psychology practices such as cuento, dichos, and spirituality. This framework fosters healing by incorporating culturally relevant approaches to mental health. Additionally, Latinx psychology addresses the intersectional experiences of sexual and gender diverse (SGD) Latinxs, highlighting their unique challenges and coping strategies. The field has evolved through the efforts of early Latino psychologists, key conferences, and institutional support, laying the foundation for current research and practice. The *Journal of Latinx Psychology*, celebrating its 10-year anniversary, continues to advance scientific discourse and inclusivity. Furthermore, collectivistic psychological leadership is essential in addressing public health crises among Latinx immigrants, as demonstrated by the Latinx Immigrant Health Alliance (LIHA). This initiative underscores the need for culturally tailored research, policy, and interventions. Future directions call for translating psychological expertise into public action, promoting social justice, health equity, and inclusion for marginalized communities.

Keywords: Latino psychology, ethnic psychology, intersectionality, collectivistic leadership, mental health

Student Presenters: Sancheska Tapia

Faculty Mentor: Prof. Sarah Hoiland

Title: Voices in Two Languages: Understanding Bilingual Student Experiences in Criminology and Criminal Justice

Abstract: Bilingual criminology and criminal justice students at John Jay College and Hostos Community College are an understudied and underserved population at these two City University of New York (CUNY) Hispanic Serving Institutions (HSIs). This research project seeks to shed light on how bilingualism, defined as understanding English and Spanish, influences academic and professional experiences. This study is significant as it highlights the challenges and opportunities bilingual students face. Participants on both campuses completed a 30-minute survey and some participated in a 70-minute focus group. As a research assistant and a bilingual criminal justice major at Hostos, I played a crucial role in recruiting students to be participants, distributing surveys, helping participants, organizing focus groups, assisting with data collection, and speaking Spanish to students who needed help. I also gained hands-on experience in research, improved data collection and analysis skills, contributed to meaningful academic work, and enhanced faculty networks. This presentation will provide an overview of the research project, my role as research assistant, and highlight early findings as well as challenges.

Student Presenter: Ayomiposi Dorcas Ogunleye

Faculty Mentor: Prof. Gail August

Title: Court Case of Gonzalez v. The Salvation Army: Language and Power in the US Courts

Abstract: Even small procedural errors can have serious repercussions, even though the legal system depends on procedural fairness to guarantee that everyone has equal access to justice. This reality is best illustrated in *Gonzalez v. The Salvation Army*, where the plaintiff's failure to have an updated address led to the case being dismissed, highlighting the crucial role that procedural compliance plays in legal proceedings. Despite the case's apparent procedural aspects, it brings up more general issues of access to justice and striking a balance between administrative effectiveness and a litigant's right to be heard. This article will investigate how technical restrictions can affect substantive rights and influence broader judicial expectations in civil litigation by looking at the legal and procedural ramifications of *Gonzalez v. The Salvation Army*. The court addressed the procedural issue of a plaintiff's failure to maintain a current address in the case of *Gonzalez v. Salvation Army*, which resulted in the action being dismissed for lack of prosecution.

Student Presenter: Frangely Mendez Gonzalez (*College Now: Fannie Lou Hamer Freedom High School*)

Faculty Mentor: Prof. J.C Williams

Title: Child Parent Relationship Therapy with Hispanic Parents

Abstract: Child Parent Relationship Therapy with Hispanic parents. The purpose of this study is to determine how well Child-Parent Relationship Therapy (CPRT) works to reduce behavioral problems in Latino children who have been recognized as being at risk for scholastic difficulties. The study also investigates how CPRT can lessen parental stress. During a 10-week CPRT program, 48 Latino/a parents of children (mean age = 4 years) took part. Results show that Latino children who are at risk for academic challenges because of behavioral issues benefit from CPRT. The results also show a significant decrease in parental stress in the parent-child bond, which is a major element affecting children mental health in general.

Key words: Latinos families, child, challenge, mental health, parental stress.

Bibliography

Baggerly, Jennifer N., (Ed). University of South Florida, Tampa, FL, US

Ray, Dee C., (Ed). Counseling Program, University of North Texas, Denton, TX, US

Bratton, Sue C., (Ed). Center for Play Therapy, University of North Texas, Denton, TX, US"

Concurrent Presentations

C-Building Room 561, 5th FL, 3:00-4:00

Moderator: Emmanuel A. Velayos Larrabure

Student Presenters: Elyas Obad & Akwasi Osei-Tutu

Faculty Mentor: Prof. Alexandra Milsom

Title: Faith & Society: The Social Influence of Christianity and Islam in America

Abstract: This presentation explores how Christianity and Islam have shaped American society, influencing its cultural, political, and social structures. Christianity has played a foundational role in U.S. history, impacting education, civil rights, and policymaking. Meanwhile, Islam, though historically marginalized, has contributed to social justice movements, community building, and interfaith dialogue. Through a panel discussion featuring scholars, activists, and religious leaders, we will examine the historical and contemporary roles of these faiths in shaping American identity. Topics will include religious influence on civil rights, education, and political engagement, as well as the evolving interfaith relationships that define modern America. By fostering an open and insightful dialogue, this event aims to deepen understanding of the ways religion continues to shape social values and public discourse. Attendees will gain a broader perspective on the coexistence and contributions of these faiths to American society.

Student Presenters: Marvin Llano, Nicole Gil, Aaron Parks, & Keyla Rodriguez

Faculty Mentor: Prof. Simona Prives

Title: LP package

Abstract: A portfolio piece that showcase typography on an album cover.

Student Presenter: Aaron Parks

Faculty Mentor: Prof. Simona Prives

Title: Invasion of CGI Editorial

Abstract: This editorial explores the growing use of CGI in modern cinema and its impact on the use of practical effects, mainly focusing on the challenges faced by Studio ADI during the production of *The Thing* prequel. This piece is also a highlight of my artistic techniques such as value and mixing B&W with Color. I highlight Studio ADI's efforts to create lifelike creatures and effects, only for the production to replace their work with CGI after the fact. The editorial emphasizes the loss of practical effects and how wide and huge the new wave of CGI has gotten. The goal is to start a conversation about the loss of a widely used art form, while also showcasing a carefully crafted blend of various design elements and techniques.

Student Presenters: Nicole Gil, Marvin Llano, Keyla Rodriguez & Aaron Parks

Faculty Mentor: Prof. Simona Prives

Title: Nicole's Portfolio

Abstract: The project I'm going to present in this event is my portfolio. It's a project that contains the works that I've been doing throughout my years in Hostos.

