

2023

Hostos Student Symposium



EUGENIO MARIA DE

HOSTOS COMMUNITY COLLEGE

THE CITY UNIVERSITY OF NEW YORK

Welcome to the Inaugural Hostos Student Symposium, made possible with the support of the Ms. Mackenzie Scott's Gift: President's Initiatives. Today, we celebrate and recognize over 80 students who have been selected to share their academic and creative achievements. The breadth of presentations and performances at today's Symposium speaks to our students' creativity, diligence, and intellectual achievement. The range of rich and engaging assignments and projects our students have completed is also a testament to the energy and dedication of our faculty. Hostos classrooms are transformative spaces where the support of our faculty and the ingenuity of our students produce new and exciting ideas, interpretations, experiments, games, performances, and projects each semester. It is exciting to have this opportunity to celebrate our students' accomplishments and to recognize the role faculty Mentorship plays in our students lives and intellectual growth. Today's conference experience will not only be meaningful to our students as a celebration but is also an opportunity for professional development and growth. As you will see from our program, our day is full of student work from across the disciplines. It took a great deal of care, time and commitment from many administrators, faculty and staff to make this day possible and many thanks are in order.

Andrea Fabrizio, PhD

Associate Dean, Office of Academic Affairs

Special Thanks

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

Hostos Student Symposium Advisory Committee

Sarah Brennan
Karla Contreras
Associate Dean, Andrea Fabrizio (Chair)
Diandra Jugmohan
Prof. Moise Koffi
Prof. Yoel Rodriguez
Prof. Marcelo Viana Neto
Prof. Nicole Wallenbrock

Hostos Jobs on Campus Interns

Keirsten Abbott
Elizabeth Quinones
Daniel Tolbert

Office Of Academic Affairs

Provost Shiang-Kwei Wang
Sarah Brennan
Natasha Brewer
Jacinta Patrice-George
Patricia Pena

Conference Center

Nelson Ortiz

Academic Computing Center

Rafael Nunez-Taveras

Duplicating

David Floyd

A very special thank you to Mitchell Rivera and our Facilities Department, Public Safety Officers, and Cafeteria for all of their support today.

Symposium Volunteers and Moderators

Prof. Aaron Botwick
Karla Contreras
Prof. Christian Caminiti
Prof. William Casari
VP Evelyn Fernandez Ketchum
Prof. Elizabeth Garcia de Souza
Prof. Anna Ivanova
Diandra Jugmohan
Prof. Alison Lowenstein-Issacs
Daliz Perez-Cabezas
Dr. Eric Radezky
Prof. Marcia Riberio
Lisanette Rosario
Prof. Nicole Wallenbrock

Faculty Mentors

Prof. Elayne Blancas
Prof. Christian Caminiti
Prof. William Casari
Prof. Michelle Cheiken
Prof. Christine Choi
Prof. Soheli Chowdhury
Ashante Diggs
Prof. Roy Debasish
Prof. Reginald Dorcely

Prof. Francisco Fernandez
Prof. Anamaria Flores
Prof. Elizabeth Garcia de Souza
Prof. Ann Genzale
Prof. Carlos Guevara
Prof. Sarah Hoiland
Prof. Fiordaliza Ippolito
Prof. Anna Ivanova
Prof. Moise Koffi
Prof. Saadia Lgarch
Prof. Damaris Lois-Lang
Prof. Alison Lowenstein-Issacs
Prof. Diana Macri
Prof. Gregory Marks
Prof. Srecko Mavrek
Prof. Alexandra Milsom
Prof. Nelson Nunez-Rodriguez
Prof. Judith Nysenholc
Dr. Sofia Oviedo
Prof. Ana Ozuna
Prof. Marcia Riberio
Prof. Bianca Rivera-Pena
Prof. Yoel Rodríguez
Prof. Victor Torres Velez
Prof. Marcelo Viana Neto
Prof. Lauren Wolf
Prof. Natasha Lorca Yannacañedo

Hostos Student Symposium

Schedule Overview

9:30-10:45

Opening Ceremony and Breakfast

Location: C391

Greetings: President Daisy Cocco De Filippis, Provost Shiang-Kwei Wang, Associate Dean Andrea Fabrizio

Keynote Address: Dr. Roosevelt Montás, Columbia University

Student Performances: Wilbert Morales; Kevin Cuello, Benjamin Casilla, Edieth Antonella Gonzalez, Andy Gutierrez, Jayleen Elissa Morales

Faculty Mentors: Prof. Natasha Lorca Yannacañedo, Prof. Victor Torres-Velez, Prof. Alexandra Milsom

11:00-12:15

Concurrent Student Presentations

Locations:

Faculty Dining Room

C-453

C-458

12:00-1:00

STEM Poster Session

Location: Gym

1:00-2:00 Celebration Luncheon for Student Presenters, Mentors, and Volunteers

Location: Gym

2:00-3:15

Concurrent Student Presentations

Locations:

Faculty Dining Room

C-453

C-464

3:30-5:00

Music Connects Us Concert Event

Location: A-Building Atrium

This event is an opportunity for people to share music that is special to them. Members of the Hostos community have submitted written responses as well as audio essays talking about songs that remind them of their family or culture. We will have live readings, listen to some recordings, raffle instruments to those in attendance, and end with a concert.

Keynote Speaker



Roosevelt Montás is Senior Lecturer in American Studies and English at Columbia University and director of the Freedom and Citizenship Program, which introduces low-income high school students to the Western political tradition through the study of original texts. From 2008 to 2018, he served as director of Columbia's Center for the Core Curriculum. He is the author of *Rescuing Socrates: How the Great Books Changed My Life and Why They Matter for a New Generation*, (Princeton University Press, 2021).

Opening Ceremony Presentations

C391 9:30-10:45

Student Presenter: Wilbert Morales, Kevin Cuello

Faculty Mentor: Prof. Natasha Lorca Yannacañedo

Abstract: We are presenting a scene from a play called *Parachute Man*, which is about family, brotherhood, and being your brother's keeper. *Parachute Man* showcases how sometimes our greatest battles and breakthroughs in life come in the form of challenges and unresolved feelings within our families. Siblings can infuriate us and present us with our greatest obstacles, while also teaching us our first lessons about unconditional love. Family is also where we experience our first traumas. *Parachute Man* shows us that the only way through facing family trauma is together.

Presentation Type: Performance

Student Presenter: Benjamin Casilla, Edieth Antonella Gonzalez

Faculty Mentor: Prof. Natasha Lorca Yannacañedo

Abstract: In today's climate, we are met with challenges that bring us closer or pull us apart. Political views are one of the many challenges that make or break us. We will be performing a scene from the play *What About the Children*. In this play, our characters will embody the tension felt in the aftermath of an ICE raid. Sonya, a 30-year-old woman, has had enough of the shameful life she's been living because of Matt's job. Matt, a 35-year-old man, has watched too much Fox News and has gone far down the rabbit hole. In this last confrontation, we are reminded of the children and the impact one's actions can have on a family. Can these two see eye to eye or will this be the end of a family?

Presentation Type: Performance

Student Presenter: Andy Gutierrez

Faculty Mentor: Prof. Victor Torres-Velez

Abstract: In the 1970's a wave of Puerto Ricans and Nuyorican's contributed to the progression of a literary movement within New York City. On a cultural level, they used their writing as a tool for the cultivation of self-identity, establishing of community, and to overcome adversity as new age Latinos being raised in New York. This led to the birth of spaces such as the Nuyorican Poets Cafe. Furthermore, through their artistic storytelling, we can begin to

decipher the dimensions existing within their Latindad. Art and poetry can be seen as a form of entertainment, cultural expression and advocacy. It is rooted in a simultaneous recount and a recording of historical migration, diaspora and the defining of one's roots. The Nuyorican Poets Cafe gave a voice to disenfranchised people, it provided them the ability to identify inequalities on a social and political level geared towards their communities. A spoken word poetry piece will accompany this essay, describing my personal experience in self-identity and my own Latindad growing up in New York City.

Presentation Type: Performance

Student Presenter: Jayleen Elissa Morales

Faculty Mentor: Prof. Alexandra Milsom

Abstract: This will be a creative writing piece about the student's life - a long poem including a visual display.

Presentation Type: Art/Visual

Concurrent Sessions

11:00-12:15 Faculty Dining Room

Special Session: Early College Initiatives

Students in this session are enrolled at either Hostos-Lincoln Academy of Science or HERO High School, which are both Early College Initiative (ECI) secondary schools partnered with Hostos Community College partner. ECI provides students with the opportunity to earn up to two years of college credit, or an associate degree, at Hostos while in high school or immediately after. By implementing an integrated curriculum with college courses as early as summer after 9th grade and offering support services, ECI strives to cultivate a college-going culture and equip students with the skills necessary for success in higher education.

Moderators: Prof. Elizabeth Garcia de Souza and VP Evelyn Fernandez-Ketchum

Student Presenter: Aishatou Tunkara

Faculty Mentor: Prof. Judith Nysenholc

Abstract: This presentation is an analysis of the poem "Against Cinderella" by Julia Alvarez, a Dominican-American poet. The poem contrasts the well-known fairy tale of Cinderella to real life to convey certain ideas about the actual nature of true love. The poem questions whether

the romantic notion of true love even exists. Alvarez rejects the concept of a perfect match between Cinderella and the prince, and instead proposes her own lesson of independence. This paper explores how the ideas expressed in the poem are conveyed through word choice and literary elements. Alvarez uses metaphors, varying points of view, and the symbolism of a shoe throughout the poem to communicate to the reader that true love is actually found within.

Presentation Type: Essay

Student Presenter: Joy Ukaoma

Faculty Mentor: Prof. Judith Nysenholc

Abstract: For my paper "Nutrition's Role in Health," I researched the importance of nutrition for different aspects of health. Our mental and physical health is directly affected by the food we eat. Sometimes nutrition can be the reason behind poor mental health. In this presentation, I will cover the history of fast food over consumption and the consequences of "food swamps" for low-income communities. To address these issues, I propose a program to encourage consumers to eat more nutritious foods and to develop healthy lifestyle habits. The program is called "Calorie Down," and it will be available online as an app. Women, people of color, and middle-aged people will be the primary targets for this program because they are the most affected by poor nutrition. This program will operate by supplying meals and healthier recipes. It will also teach participants healthier habits to replace binge eating, such as aerobic exercises and meditation.

Presentation Type: Essay

Student Presenter: Maria Shahbain

Faculty Mentor: Prof. Judith Nysenholc

Abstract: Walt Disney is a multibillion-dollar company aiming to entertain children across the nation. Disney, having a net worth of approximately \$176.93 billion dollars as of 2022, uses sweatshops and child labor in developing countries to produce their products to then be sold in the United States. Large companies are attracted to Haiti because of its poverty, destitute conditions, and very high unemployment rates. It enables these businesses the ability to underpay these hard-working people because of the dire situation they are in and the corrupt government that they have. Third parties such as government agencies or consumer boycotting groups should interfere in this humanitarian crisis. They should assist to provide and prevent further exploitation of third-world countries with scarce resources. It's hard to believe but many fashion brands are still using sweatshops, child labor, and slavery today and the media is covering all these events from the public eye.

Presentation Type: Essay

Student Presenter: Amanda Moreno

Faculty Mentor: Prof. Elizabeth Garcia de Souza

Abstract: Strings of Triumph

My creative non-fiction narrative begins in medias res, describing the feelings of a twelve-year-old, playing the violin in the Yankee Stadium. Flashback is used to recount the first time I touched a violin in fourth grade, to the long hours of practice in middle school, until my grand performance in the stadium. By reading my prose, I hope to project onto my audience what I felt in that pivotal moment, so they will also be able to live in that moment. Moreover, verb tenses are switched from the past to the present tense to evoke the profound senses of stillness and focus that I myself felt while playing in front of the crowd in Yankee Stadium. The narrative concludes with the acknowledgment that music programs are vital for school kids, and a show of gratitude to both my mother and orchestra teacher who supported me with my love for the violin.

Presentation Type: Essay

Student Presenter: Roxaan Vanderhorst

Faculty Mentor: Prof. Ippolito Fiordaliza

Abstract: This presentation will be about my home and where I grew up—New York City (NYC), specifically the Bronx. I will give you a peak into my borough, discuss some interesting facts, and describe why this place is home to me.

Presentation Type: Essay

Student Presenter: Guadalupe Bautista Cruz

Faculty Mentor: Prof. Fiordaliza Ippolito and Ashante Diggs

Abstract: Love in Different Ways (Amor En Diferentes Maneras)

In the Fall of 2022, I participated in a wonderful project with my Spanish Professor, Prof. Ippolito. Our project is called "Relieve Your Experiences" (RYE), our theme: writing can heal; writing can open your HEART! This project offered a space for relief, where we can express our voices with our topics about our families, feelings, and daily life.

Presentation Type: Essay

Student Presenter: Elizabeth Frias

Faculty Mentor: Prof. Judith Nysenholc

Abstract: "The Effect of Nicotine on Adolescent Brain Development." To reduce the population of traditional smokers, electronic vapes were produced to minimize the detrimental health effects of tobacco on the lungs. Lung cancer, bronchitis, and several other respiratory illnesses are the leading cause of death in the U.S. because of cigarettes. The intention to prevent tobacco withdrawal in adults while finding a healthier alternative to smoking led to the manufacture of e-cigarettes. However, vape pens have become increasingly popular among the current generation of adolescents. High schoolers were reported to be consistent consumers and become addicted to the nicotine flavors, euphoric feeling of a "hit" and fitting in with societal trends. In recent studies, scientists have discovered the impact of nicotine on early brain development. This research paper discusses the adverse effects of vaping on teenagers: memory retention, behavioral disorders, and cognitive impairment. These symptoms exacerbate as adolescents reach adulthood. I propose solutions to counteract the vaping epidemic by spreading awareness of its neurological damage, educating adolescents, and giving out incentives to quit e-cigarettes.

Presentation Type: Essay

Student Presenter: Jennifer Padilla

Faculty Mentor: Prof. Michelle Cheiken

Abstract: Title: Bronx Community Board District 4

This presentation about Community Board District 4 was the assignment for the Infrastructure unit of the capstone, Bronx Beautiful. The presentation includes information about the district's built environment, residents, and public services. The needs of the district, established by the Community Board, are addressed. Community leaders are introduced such as the members of the Community Board, City Council, Assembly and Congress.

Presentation Type: Capstone Assignment

Student Presenter: Fernanda Avendano

Faculty Mentor: Prof. Ippolito Fiordaliza

Abstract: This presentation will focus on a moment in my life that I will never forget. The loss of my uncle changed me in a way and I want to share with the audience.

Presentation Type: Essay

Student Presenter: Evelyn Rodriguez Gomez

Faculty Mentor: Prof. Ippolito Fiordaliza

Abstract: Journey Through Life: In the Fall of 2022, I participated in a wonderful project with my Spanish professor, Prof. Ippolito. Our project is called "Relieve Your Experiences" (RYE), our theme: writing can heal; writing can open your HEART! This project offered a space for relief, where we can express our voices with our topics about our families, feelings, and daily life. In this short reflection, I portrayed a nonfiction story about myself and my family. I emphasize how teens have dreams and passions, how they might express themselves and their family issues. Through my situations, some will relate, other will see it as unfortunate; either way this is my truth.

Presentation Type: Essay

Concurrent Sessions

11:00-12:15 C-453

Moderator: Prof. Alison Lowenstein-Isaacs

Student Presenter: Tiana Cintron

Faculty Mentor: Prof. Alison Lowenstein-Issacs

Abstract: "Altered: A Short Story": A work of creative fiction, "Altered," is about teen pregnancy. When Jessie, a 17-year-old foster child living in the Bronx, discovers she's pregnant, she must process her emotions while navigating her existence under her elderly foster mother's close watch. The story, set in current day NYC, focuses on her emotional journey through this life-altering experience. Told in third person point of view, "Altered" is a transformative tale of resilience. This story was written as an assignment for a Hostos English course in creative writing and has been revised for the symposium.

Presentation Type: Short Story

Student Presenter: Cassandra Garzon

Faculty Mentor: Prof. Christine Choi

Abstract: McDonald's, Dunkin' Donuts, and Hibachi Grill & Supreme Buffet. What do these fast food chains have in common? Food waste. We all are familiar with this topic, but do we really know how much food is wasted daily? In households we waste one pound of food per person a day. In contrast, restaurants waste around half a pound of food per meal, which is a thousand times more! In my paper, I argue we can reduce waste by 40% by using technology to help sell food that is going to be thrown out. For instance, there is an app called "Too Good to Go" that has been helping fast food restaurants sell leftover food discounted by fifty percent. Countries in Europe have already seen a dramatic reduction in this problem after using these technological methods. This is a big wake up call to America, because if they did it so can we.

Presentation Type: Essay

Student Presenter: Fatima Bashir

Faculty Mentor: Christian Caminiti

Abstract: Should TikTok be banned? With over 1 billion users, TikTok is one of today's most popular and fastest growing social media applications. While its millions of teenage users may enjoy the newest trends and challenges, many remain ignorant of the troubling dangers of the app. The provocative persuasive essay presented here argues that the U.S government should ban TikTok on all devices because it threatens national security, endangers minors and lowers the attention span of humans.

Presentation Type: Essay

Student Presenter: Cynsere Galindez

Faculty Mentor: Prof. Anamaría Flores

Abstract: Taking Back Your Power: The piece I will present is the poem "The Heart and The Fist" by Rudy Francisco because of how much it resonates with me. I'm part of a non-profit organization called All Kings which is centered around men's trauma healing. We promote healthy masculinity to a target demographic of formerly incarcerated men and men of color, but all men are welcome. We teach that because of patriarchy, misogyny, male supremacy, cissexism and homophobia, men we are too often led to believe that anger is the only emotion we can feel. The truth is however that anger is a protective or secondary emotion, and there is always something under the anger such as sadness, shame, fear etc. that needs to be unpacked. I've participated in this work for almost four years so this concept is very important to me, and I want other men to understand and embrace it as well.

Presentation Type: Poem

Student Presenter: Miram Fidelis

Faculty Mentor: Prof. Ann Genzale

Abstract: Something as simple as a compliment can change a person's day from bad to good, but with priorities like work, school, and friends, taking the time to learn core values like kindness may seem like too much. This essay aims to inform people about the effectiveness of learning kindness at a young age. My presentation will focus mainly on the positive effects instilling kindness can have on adolescents as they get older. My research has shown that while having a child can be stressful, it is important to teach kids the core values of kindness. Just as those who were bullied can grow up to be bullies themselves, those who are raised with kindness can also foster this trait in others.

Presentation Type: Essay

Student Presenter: Qianwen Yang

Faculty Mentor: Prof. Ann Genzale

Abstract: This presentation will be about my personal experience as a first-generation Chinese-American navigating through New York City's public-school system. Being a part of the Chinese diaspora, I've had the opportunity to attend school back home in the mainland as well as public schools in different neighborhoods in New York City. My experience on a microscale reflects the larger picture of what kids who look like me go through as they traverse through the process of assimilating into modern American society while maintaining our culture and heritage. I will also share how artistic expression aided me in my journey towards self-love and acceptance, along with the self-discoveries I've made when I turned my doubts into motivation for creating better representation of my cultural inheritance.

Presentation Type: Essay

Concurrent Sessions

11:00-12:15 C-458

Moderator: Prof. Aaron Botwick

Student Presenter: Djossou Yassir

Faculty Mentor: Prof. Roy Debasish

Abstract: Role of PARP Inhibitors in Progression and Treatment of Breast Carcinogenesis

Poly (ADP-Ribose) polymerases (PARPs) are one of the important components of base excision repair pathway for single strand DNA breaks. The mechanism of action for PARP inhibitors in tumors with homologous recombination deficiency is synthetic lethality, as the simultaneous blockage of both pathways prevents the tumor cells from repairing DNA damage. Along with PARP enzymes are essential for DNA damage repair with defective homologous recombination DNA repair, such as BRCA1- and BRCA2-mutations are targets for PARP inhibitors (PARPi) through the exploitation of synthetic lethality. A number of PARPi are currently undergoing clinical evaluation in breast cancer, with Olaparib and Talazoparib having demonstrated superior efficacy compared with standard chemotherapy in advanced germline BRCA-mutated cancer. In this project, we will study the PARPi binding site and simulated mutation of those sites result in critical treatment of breast cancer through drugs treatment as a therapeutic application for prevention of breast cancer progression.

Presentation Type: Poster/PPT

Student Presenter: Abigail Boateng

Faculty Mentor: Prof. Srecko Mavrek

Abstract: Introduction to Yoga was a course I took this semester at Hostos Community College; even though it was not required, I learned so much from it. I've mastered the internal, mental, and physical control of my consciousness and body. A person's ability to regulate their thoughts, in my opinion, is their most important gift, especially when they use it to help others and themselves. The eight limbs of Yoga are a gift that continues giving, so I'd like to present them. They are as follows:

Yama - Restraints, moral disciplines or moral vows

Niyama -Positive duties or observances

Asana - Posture

Pranayama - Breathing Techniques

Pratyahara - Sense withdrawal

Dharana - Meditative Absorption

Dhyana - Meditative Absorption

Samadhi - Bliss or Enlightenment

Presentation Type: Performance

Student Presenter: Alexandra Carrero

Faculty Mentor: Prof. Roy Debasish

Abstract: Breast cancer is a genetically and clinically heterogeneous disease, and the second most frequent cause of cancer death among American women. It accounts for ~30% of overall cancer deaths among women worldwide. Recent progress in cancer research has shown the importance of B-catenin, a molecule that plays a pivotal role in cell-to-cell adhesion as a transcriptional activator in signal transduction pathways involved in regulation of carcinogenesis processes. Potential role of this molecule in breast cancer pathogenesis was examined in this study by analyzing differential expression of B-catenin (gene and protein) in a panel of radiation induced and estrogen treated breast cell line model. Results were compared and contrasted with both non-tumorigenic and tumorigenic breast cell lines with reference to MCF-10F as immortalized control cell line. Finally, analyzing the DNA sequence at all possible mutations found within the exon-3 of B-catenin gene was translated into amino acid sequence. Then EMBOSS secret was used to convert the translated amino acid sequence into a FASTA file by using PDB format to generate 3D models with the help of Rasmol or BioViz program. Finally, comparing the mutation sites by superposition of 3D- sequences gives an overall idea about the course of carcinogenesis and progression of the disease.

Presentation Type: Powerpoint

Student Presenter: Juana Marte

Faculty Mentor: Prof. Ana Ozuna

Abstract: Stories of Resilience, Change, and Continuity: Transnational Women Share Their Immigration Stories

For this project, students will examine their immigration experience offering the unique perspective of the challenges faced as women when adapting to life in the United States. For the first part of this project, students will contextualize their immigration story noting their challenges in navigating a new language and culture(s), how they negotiate their identity within the transnational context, and describe their current academic trajectories, and future aspirations. The next part of the project requires students to complete an ethnographic style interview to examine the immigrant experience of an older woman in their family who immigrated to the United States. The interviewee could currently reside in the United States or their country of origin. The conclusion will provide a comparative analysis of how their immigration trajectories differ and coincide.

Presentation Type: Powerpoint

Student Presenter: Ali Khan

Faculty Mentor: Prof. Gregory Marks

Abstract: I am presenting my essay that I have done in Professor Marks' class. I felt like this one of my strongest pieces of writing in his class and generally speaking when I have written essays. I want to see others viewpoints and opinions on my essay. Hopefully people understand my viewpoint and understanding of my writing and question me. I hope I can meet other writers and editors to help better critic my writing so I can better my writing and comprehension as a whole. This essay that would be presented would be about comparing two different poems about the main theme sacrificing.

Presentation Type: Essay

STEM Poster Session

12:00 – 1:00 Gym

Student Presenter: Nataliya Dixon

Faculty Mentor: Prof. Tanvir Prince

Abstract: Title: Analysis of Various Mathematical Model in Harvesting Fish Population:

More than 200 million people rely on fishing as a source of food and income, according to a recent United Nations report. Unregulated fishing techniques, however, can pose a threat to the safety of marine species and have a significant impact on the ecology. A severe illustration of the effects of overfishing is the collapse of the codfish in Newfoundland in the early 1900s. It's critical to strike a balance between ecological concerns and economic needs. For this, a number of mathematical models have been developed. We shall investigate various mathematical models of the fish population in this study. We'll also add additional parameters to the model to see how the dynamical system is affected (either positively or negatively).

Presentation Type: Poster

Student Presenter: Cynthia Molina

Faculty Mentor: Prof. Soheli Chowdhury

Abstract: The goal of this research is to discover why certain developed countries had more fatalities than undeveloped countries in the world. Narrowing in what are if any correlation between COVID-related death and people's lives, living conditions, access to public health, environment, gut bacteria, and/or economic status.

Presentation Type: Poster

Student Presenter: Jose Armando Keppis

Faculty Mentor: Prof. Yoel Rodríguez

Abstract: Discovery of Entry Blockers for SARS-CoV-2 Spike Glycoprotein Using In-Silico Drug Design. Coronavirus Disease 2019 (COVID-19) is caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). Viral infection occurs when the SARS-CoV-2 Spike Glycoprotein Receptor Binding Domain (RBD) attaches to the human Angiotensin-Converting Enzyme 2 (hACE2). We hypothesize that small molecules could block the binding of SARS-CoV-2 Spike Glycoprotein RBD and hACE2 to inhibit viral entry. Our group previously discovered three SARS-CoV-2 small-molecule inhibitors (hits). Here, we aim to identify analogs of the discovered hits with greater potency. Thus, we conducted ligand-guided searches using vROCS to rank ~4.3 million small molecules using the Tanimoto scoring function against hits-pharmacophore. An analog database of 10,000 top-ranked molecules from each hit was selected and taken through structure-based molecular docking against the Spike Glycoprotein using OEDocking and FRED programs. The Chemgauss4 scoring function and visualization analysis were used to determine the high-ranking molecules (~50) which will be prioritized for experimentation using the SARS-CoV-2 cell-based pseudotype assay.

Presentation Type: Poster

Student Presenter: Surdy Rode Felix

Faculty Mentor: Prof. Tanvir Prince

Abstract: Analysis of Various Mathematical Models of Harvesting Fish Population

A recent United Nations survey pointed out that more than 200 million people depend on fishing as their source of food and income. However, uncontrolled fishing practices can threaten the security of marine life and can have a drastic effect on the ecosystem. For example, the collapse of the cod fish in Newfoundland in early 1900 is an example of the dramatic impact of overfishing. It is important to balance economic needs and ecological considerations. There are various mathematical models established for this purpose. In this research, we will study various mathematical models of the fish population. We will also introduce new parameters into the model and see how it changes (for the better or worst) the dynamical system.

Presentation Type: Poster

Student Presenter: Jose Armando Keppis, Edward Allen *Marian Albornoz

Faculty Mentor: Prof. Yoel Rodríguez

Abstract: Coronavirus Disease 2019 (COVID-19) is caused by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2). Viral infection occurs when the SARS-CoV-2 Spike Glycoprotein Receptor Binding Domain (RBD) attaches to the human Angiotensin-Converting Enzyme 2 (hACE2). We hypothesize that small molecules could block the binding of SARS-CoV-2 Spike Glycoprotein RBD and hACE2 to inhibit viral entry. Our group previously discovered three SARS-CoV-2 small-molecule inhibitors (hits). Here, we aim to identify analogs of the discovered hits with greater potency. Thus, we conducted ligand-guided searches using vROCS to rank ~4.3 million small molecules using the Tanimoto scoring function against hits-pharmacophore. An analog database of 10,000 top-ranked molecules from each hit was selected and taken through structure-based molecular docking against the Spike Glycoprotein using OEDocking and FRED programs. The Chemgauss4 scoring function and visualization analysis were used to determine the high-ranking molecules (~50) which will be prioritized for experimentation using the SARS-CoV-2 cell-based pseudotype assay.

Presentation Type: Poster

Student Presenter: Yassine Gaye

Faculty Mentor: Prof. Yoel Rodriguez, Ph.D.

Abstract: Project Title: In Silico Discovery of Small-Molecule Modulators of BACE1 as Alzheimer's Therapeutics Agents

Alzheimer's disease (AD) is a lingering progressive neurodegenerative disorder that causes patients to lose cognitive function. The inhibition of transmembrane enzyme β -site APP cleaving enzyme 1 (BACE1), an aspartic protease essential for the generation of β -amyloid, shows promising therapeutic results. Due to its open active site, BACE1 cannot be effectively inhibited by small molecules capable of penetrating the blood brain barrier. However, it has been shown the possibility of inhibiting the enzymatic activity of BACE1 by targeting its exosites via small molecules. Our hypothesis centers on small molecules that could inhibit BACE1 enzymatic activity through its exosites. Thus, we aim to discover small-molecule modulators of BACE1 enzyme by using computer-aided drug design. Towards this, a literature review on small-molecule BACE1 inhibitors and virtual screening of small-molecule databases against BACE1 to identify high-affinity-selective inhibitors are being conducted. The study's insights could help better understand and treat AD.

Presentation Type: Poster

Student Presenter: Aaron Arjunlall, Fatima Bah, Kevin Dillon

Faculty Mentor: Prof. Lauren Wolf

Abstract: " C's will get Degrees:" The Forgetting Curve and the Benefits of Consistent Study Habits

Our research presentation is focused on memory and retention of learned material. Our title "C's Will get Degrees," stems from our theory that if the degree of difficulty of the material studied is not high, more of that information can be retained over some time without frequent study. We used 19th century Psychologist Herman Ebbinghaus's forgetting curve as our initial model. Ebbinghaus was the first to quantify memory experimentally and show it as a mathematical function. We use this logarithmic function to show a correlation between the difficulty of the material studied and the ability to retain that information over different periods. Throughout our research, we examine techniques that can counteract the forgetting curve such as "over-studying" and regular reinforcement. Our data will come from an experiment involving the memorization of numbers/formulas and will be conducted over a period of weeks beginning after the spring 2023 semester.

Presentation Type: Poster

Student Presenter: Aaron ArjunLall, Fatima Bah, Kevin Dillon, Yabraj Jassi

Faculty Mentor: Prof. Lauren Wolf

Abstract: Examining Disparities in Access to Healthy Food and its Ramifications in Traditionally Underserved Communities

Our research will investigate food inequality as a racial/environmental injustice issue. Produce business data suggests the average cost of fruit is approximately 71 cents per serving and the average cost of vegetables is approximately 77 cents per serving [producebusiness.com]. "Bodegas to Supermarkets" by Renee King stated that fruit and vegetables cost between \$2.10-\$2.60 dollars per day. Our research examines why disenfranchised inner-city neighborhoods host a disproportionate number of bodegas in comparison to supermarkets. In many parts of the Bronx, there are approximately 35 bodegas to every supermarket, and in parts of Brooklyn approximately 55 bodegas to every supermarket. We will compare prices and food quality from bodegas to supermarkets and examine samples of poor urban areas throughout New York City. Our study will show that there is a correlation between our bodega-to-supermarket mathematical model and life expectancy in historically underserved communities.

Presentation Type: Poster

Student Presenter: Sor Angel Bello, Altagracia De La Rosa

Faculty Mentor: Prof. Anna Ivanova

Abstract: Phytoremediation of Water Pollution by Heavy Metals: The Effect of Thai, Genovese and Purple Basil on the Concentration of Copper and Lead in Water.

Water pollution is a problem of great importance. This research project focuses on studying water pollution by heavy metals using Phytoremediation method, a low-cost and natural way to clean water of impurities, such as heavy metals. The project implements the hydroponic gardening system - a soil-free approach to grow the experimental plants and consists of two stages - growing and observing plants and contaminated water treatment. The experimental plants, thai, genovese and purple basil have been growing in hydroponic system and then will be used as treatment for water samples contaminated with lead and copper. Solutions of copper and lead will serve as contaminated water samples. The effectiveness of the experimental plants in reducing the levels of copper and lead in water samples will be assessed using the Complete Water Testing Kit. This project has a potential to be applied widely in geographical areas with poor water quality.

Presentation Type: Poster

Student Presenter: Andre Watson

Faculty Mentor: Prof. Marcia Riberio

Abstract: Solanaceae family members are important commercial crops widely used in the culinary, pharmaceutical and beverage industries. *Capsicum annum* 'lunchbox yellow sweet pepper' is an annual vegetable and commonly cultivated due to its edible qualities, delicate taste, flavor, color, and high nutritional value. It is a good source of vitamin C, potassium, water, carbohydrates, protein, and fat. Can be used in landscaping or flower garden. Plant growth regulators (PGRs) play an essential role in metabolic processes such as, but not limited to, cell division, differentiation, organogenesis, germination and have been used to increase fruit quality and improve shelf life. These products are used on a wide variety of crops and in horticulture. The objective of PGRs foliar application were performed to determine growth, chlorophyll content, fruit quality and size, detect DNA polymorphism, and floral biology. Preliminary results determined significant differences in chlorophyll content, plant growth and fruit length.

Presentation Type: Poster

Student Presenter: Ayah Soliman and Thierno Diallo

Faculty Mentor: Prof. Anna Ivanova

Abstract: The Effect of Mint, Lemon Balm and Sage on the Concentration of Copper and Lead in Water

Water pollution caused by heavy metals is a major environmental problem, as well as a threat to human health. Thus, there is an urgent need to address this issue on a priority basis. The purpose of this research project is to study the effectiveness of aromatic plants of Mint botanical family (mint, lemon balm and sage) in treating water polluted by heavy metals

(copper and lead). We apply phytoremediation approach - a cost effective and eco-friendly method to address water pollution by heavy metals. The project is conducted in two stages: growing aromatic herbs mint, lemon balm and sage in hydroponic system and then treating contaminated by heavy metals water samples with these experimental herbs. The solutions of copper and lead will be used to represent water contaminated by these metals. The effect of each herb on the concentration of lead and copper in solutions will be tested and compared.

Presentation Type: Poster

Student Presenter: Raudy Lopez Fabre

Faculty Mentor: Prof. Francisco Fernandez

Abstract: Spectrophotometric determination of zinc in food products.

Zinc is a vital element for many physiological roles in human beings. Zinc is a significant player in the creation of DNA, growth of cells, building proteins, healing damaged tissue, and supporting a healthy immune system. Nevertheless, excess amounts of zinc can be harmful for humans causing nausea, dizziness, headaches, vomiting, loss of appetite, lower immunity, and low levels of HDL (high density lipoprotein). The objective of this research is to determine the concentration of zinc in food products, especially those which have not been determined by the companies. This research will focus on food products such as the "palmito/hearts of palm" from a Hispanic company called Goya. The spectrophotometric method will be used to determine the concentration of zinc using 3-hydroxybenzylaminobenzoic acid.

Presentation Type: Poster

Student Presenter: Madjamaro Djane

Faculty Mentor: Prof. Francisco Fernandez

Abstract: The presentation will be about the Spectrophotometric determination of Zinc in water sample using 3-Hydroxybenzylaminobenzoic acid. My mentor told me that we will work in the lab and collect data with many trials as possible for more accurate information to master the apparatus or materials. We will use this data to produce the abstract itself, introduction, experimental, procedures, results and discussion, the effect of PH, graph absorbance vs wavelength, a table with limiting concentration and species, a table with water samples such as (drinking water, river water, etc) and conclusion, acknowledging the references that we will use during the process.

Presentation Type: Poster

Student Presenter: Elizabeth Soto

Faculty Mentor: Dr. Sophia Oviedo

Abstract: The Left Ventricular Assistant Device (LVAD) is a therapeutic option for patients with advanced heart failure, developed initially as a bridge to transplant (BTT), and recently used as a destination therapy (DT) for patients that are ineligible for transplant. The study's primary aim was to assess the extent to which LVAD would improve patients' quality of life (QoL) as measured by the 12-item Kansas City Cardiomyopathy Questionnaire Overall Summary Score (KCCQ OSS 12) before and after L.V.A.D. implantation. Retrospectively, we studied 12 Hispanic patients with advanced heart failure who underwent LVAD (HEARTMATE-3) implantation as a bridge to transplantation (BTT in 11 patients) or destination therapy (DT in 1 patient). Results show that KCCQ OSS scores for QoL were significantly higher overall after LVAD implantation. Patient's quality of life and health status were much improved, showing LVAD is a viable option for patients with advanced heart failure.

Presentation Type: Poster

Student Presenter: Katie Arzu and Laura Lucas

Faculty Mentor: Prof. Reginald Dorcely

Abstract: This study investigated the difference between aural and visual instruction approaches with pre-and college students. The study raised the following question: Does a significant statistical difference exist between aural and visual learners' test scores? Our target population consisted of entering and continuing college students in various majors who read and listened to a science passage and then took a quiz that assessed their content knowledge. The data collected from the surveys contained students' age, education levels, and test scores. We used Excel for the data entry and compilation and SPSS for data analysis. The findings suggested a significant difference between the aural and visual learners' test scores with a p-value less than the significance level. Further investigations are necessary to ensure the results did not occur by chance.

Presentation Type: Poster

Student Presenter: Gladys Medina de Munoz and Yaxeny Hernandez

Faculty Mentor: Prof. Moise Koffi and Elayne Blancas

Abstract: Investigating the Decline of Elephants' Population in the United States Zoos

Elephants play an essential role in the balance of our ecosystem. However, their population dropped significantly by 54% between 1969 and 1979 due to various reasons, including poaching and human-elephant conflicts. Studies showed that over the past five decades, 390

elephants died in the Association of Zoos & Aquariums (AZA)-accredited zoos in the United States. This research aims to identify the significant causes of elephant mortality in American zoos. This research utilizes secondary data collected from reports, zoo websites, and publications. It is hypothesized a rapid decline of the elephant population in US zoos. According to preliminary results, poor animal welfare and zoo maintenance may be related to an increase of elephant mortality in US zoos. Findings indicate that poor animal treatment and loneliness trigger a quadratic growth of elephants' death rate in US zoos. More investigations are required to confirm these results.

Presentation Type: Poster

Student Presenter: Brando Mendez, Jorge Ortiz, and Maldonado Jorge

Faculty Mentor: Prof. Moise Koffi and Clement McCalman

Abstract: Design of a Mini Domestic Refrigerator with Plywood Cabinet Walls

Domestic Refrigerators are power-consuming devices commonly used for food storage and conservation. This research aims to design a cost-efficient domestic mini refrigerator of size 33.5cm x 18.75cm x 19.75 cm with a cabinet made of plywood. The prototype was compared to a commercial refrigerator of the same technical characteristics. Temperature data was collected at specific locations in the refrigeration cycle using a FLIR E4 Infrared Camera and a digital thermometer with a J-type thermocouple. It is hypothesized that the coefficient of performance (COP) of the prototype with a less insulated cabinet will be slightly lower compared to the one obtained with the commercial refrigerator. This result is confirmed by a higher cooling rate of a water bottle placed in the commercial refrigerator. Such an innovative and cost-efficient refrigerator with a cabinet made of plywood may be used for food conservation in rural areas or underdeveloped countries.

Presentation Type: Poster

Student Presenter: Julianne Cepero

Faculty Mentor: Prof. Nelson Nunez-Rodriguez

Abstract: My poster goes over the effects of how the pandemic affected different learning styles and with the expanse of technology finding a better way to integrate art into science to make teaching virtually more helpful with diagrams and breakdown that are visually engaging to our peers. My poster mainly focuses on digitalizing lesson plans in regards to environmental science and turning lab-based workloads into film and animation so that those working remotely can follow along and understand the material.

Presentation Type: Poster

Student Presenter: Sene Serigne

Faculty Mentor: Prof. Diana Macri

Abstract: Temporomandibular disorders (TMD) are painful musculoskeletal disorders which involve the muscles of mastication, the temporomandibular joint (TMJ) and/or several anatomical structures in the stomatognathic system. These alterations lead to myofascial pain, disc displacement, joint pain and TMJ degeneration or inflammation. TMD are divided into five types: The TMD is classified in five disorders: The Masticatory Muscle Disorder (myofascial pain/dysfunction), Internal Disc Derangement (with/without reduction, disc perforation), Arthritis (inflammatory/noninflammatory), TMJ Mobility Disorders (subluxation, dislocation, ankyloses), and Neoplasia (benign, malignant). The purpose of this literature review is to give a broad overview of these disorders.

Presentation Type: Poster

Concurrent Sessions

2:00-3:15 Faculty Dining Room

Moderator: Dr. Eric Radezky

Student Presenter: Joel Lopez

Faculty Mentor: Prof. Srecko Mavrek

Abstract: Swimming at Hostos

I will present a Beginning Swimming class video portfolio which will help other students learn more about this course. The project will demonstrate the importance of learning various swimming techniques and skills as part of the course. The video centers around my and my classmates' experiences in Professor Mavrek's swimming course. It projects the excitement and nature of the course. Swimming lessons are vital for developing personal safety and lifesaving skills. The course provides students with the freedom and joy to master technical swimming and diving skills. My video project demonstrates how students can enjoy the course among their own peers and an encouraging instructor. The video displays different methods for learning swimming aligned with TPSR goals including personal and social skills development. My hope is that these materials will attract future students to the supportive learning environment our instructor presented to us.

Presentation Type: Art/visual

Student Presenters: Luis Lopez, Rodney Thomas, Stephanie Baltodano, Julius Pizarro, Kiran Manni, Keyanna Young, Akira Kawakami

Faculty Mentor: Prof. Marcelo Viana Neto

Abstract: Terminal Station:

The Other Possible Games studio is proud to present, "Terminal Station." The members created the game over the Summer of 2022 with the guidance of Professor Viana Neto. We learned to communicate and build ideas off one another in the initial conceptualization phase of the game. Once we had a solid idea and foundation that we were content with, we moved on to creating physical prototypes to flesh out mechanics and refine what we wanted the player to experience. Turning our physical ideas into a digital prototype and eventual into game was a fun challenge. Learning and utilizing different skills to make each one of our portions of the game function, then merging it all into a proper game, was incredibly fulfilling. We also had the opportunity to present our ideas and get feedback from professional game designers and gain insight into potential jobs we may be interested in.

Presentation Type: A game

Student Presenter: Karla Romero

Faculty Mentor: Prof. Sarah Hoiland

Abstract: Social Responsibility and the CUNY Rising Alliance

This service-learning capstone project focuses on the New Deal for CUNY Rising Alliance. The goal of this project is to raise awareness and urge students to participate in this movement. Raising awareness to the public and elected officials could eventually mean free tuition for all, accessibility to more success coaches and mental health professionals, and the hire of full-time faculty and increase of adjunct pay. Direct actions such as the March in March and a Teach-In illuminated social responsibility and how vital it is one recognizes the impact of one's actions on our communities, especially in relation to social issues. By participating in this service-learning project, I learned more about CUNY, legislative processes, activism, and it helped build my communication skills. A PowerPoint presentation will include photographs, student testimonials, and some ways to reach out to elected officials.

Presentation Type: Powerpoint

Student Presenter: Melanie Villavicencio

Faculty Mentor: Prof. Sarah Hoiland

Abstract: Changing the Community One Day at a Time

Part of the Solution (P.O.T.S.) is a non-profit organization that has been open since 1992 and I have a total of 9 hours of volunteer work at P.O.T.S. Each time I volunteered I was able to do a different task, giving me various points of view. The basic needs of life are provided in this community center at ZERO cost. P.O.T.S offers the communities in the Bronx a place to be taken care of as any other person, with dignity and non-judgment. This project was not only a course expectation but an experience to remember. Impacting the lives of many, not only homeless and drug addicts, but even workers from the auto shop across the street, gave me a smile in my heart. By connecting my P.O.T.S experience with the Bronx Beautiful capstone unit "Beauty," this presentation will showcase that beauty through a video created about the experience. If one day, and one person, at a time can change and impact another person, physically or mentally, it can spiritually and emotionally move the world. I believe that if we all do a little more each day, we are able to protect our culture, our community, our home, the Bronx.

Presentation Type: Powerpoint

Student Presenter: Zaira Maduro

Faculty Mentor: Prof. Sarah Hoiland

Abstract: Emigrate for a Dream: One Student and Two Universities

By examining the CUNY Rising Alliance and the New Deal 4 CUNY, connections can be made to the struggle for higher education within my home country of Venezuela. Through a partnership with the CUNY Rising Alliance (CRA), this project aims to raise awareness through direct actions such as a march from Brooklyn to Manhattan and a Teach In at Hostos Community College. As a student from Venezuela, this project offers a comparative look at the two higher education systems, including the student protests occurring within each system. By conducting interviews with a friend in Venezuela and drawing upon my experiences in these two university systems, this project offers a unique view of two troubled systems and the advocacy efforts to ameliorate some of the issues. With this work, we include all those who desire to study, but still, many barriers prevent them from reaching that goal. By including an autoethnographic component, my own story of struggle and financial barriers provides a case study for the larger New Deal 4 CUNY movement.

Presentation Type: Powerpoint

Concurrent Sessions

2:00-3:15 C-453

Moderators: Prof. Christian Caminiti and Prof. William Casari

Student Presenter: Ian Ayala

Faculty Mentor: Christian Caminiti

Abstract: The poem I'd like to present, "Momma Karma," is a creative expression of the universal truth "What goes around, comes around." All of the good or evil we put into this world is destined to find us again. Poetry is the best way to convey this truth as it allows us to re-imagine Karma as an all-seeing and all-knowing "queen of cosmic justice." In the poem I used many different poetic devices—simile, metaphor, rhyming and alliteration—but the most prominent device is personification. By giving Karma human attributes readers are invited to consider something familiar anew.

Presentation Type: Poem/Poetry reading

Student Presenter: Aisha Ivie

Faculty Mentor: Prof. Casari

Abstract: World Changers

I am proud to say that I was born and raised in the Bronx, and I am not embarrassed or ashamed. The Bronx has faced many years of neglect, abuse and abandonment from the government. Ten years of fires left the Bronx devastated and a hopeless place to live. The crack epidemic destroyed lives and families, and the government gave money to Jewish and white residents to move out of the Bronx, leaving behind African-Americans and Latinos. Robert Moses, came and tore down many buildings to build the Cross Bronx Expressway, forcing many families to relocate. Throughout all the chaos it birthed people who fought for the rights of the people and the reputation of the Bronx. These women went beyond for changes to take place, and these women are Hetty Fox, Irma Fleck, Evelina Antonetty, and Lillian Edelstein.

Presentation Type: Powerpoint

Student Presenter: Ammina Wescott

Faculty Mentor: Prof. Torres-Velez

Abstract: Monoculture within the Caribbean with a specific focus of Guatemala.

Monoculture is an economic activity that relies on the intensive use of land, water, and pesticides for the production of cash crops. These large-scale agribusinesses often residing in the hands of foreign capital, benefit common folk very little. Although at first glance, this type of agriculture might seem harmless, it might in fact have negative impacts on the population.

Some impacts have to do with a lack of access to income/jobs, livelihoods, and even nutrition. I want to explore why many LA countries resort to this practice when it does not benefit many citizens. Is it solely due to the money involved and who wins after these transactions? Why is it that these lands are being bought to house monoculturalism? Additionally, poverty due to a lack of job opportunities leads to unhealthy citizens and more susceptibility to lifestyle diseases. Literature has helped support/influence my topics further. This essay is a literature review on the various effects of monoculture in Guatemala and fellow LAC countries are also reviewed to support research. Bodies of literature argue that monoculture mainly has downsides for LAC countries and that it benefits western countries that solely profit off these large-scale mono-crop productions. Therefore, this project validates that monoculture allows the U.S. and Europe to continue their exploitative relationships with countries like Guatemala and other LAC countries that export to western countries. It should be noted that Europe and the U.S. continue their exploitation of LA resources well into the 21st century.

Presentation Type: Powerpoint

Student Presenter: Diego Muniz

Faculty Mentor: Prof. Victor M Torres-Velez

Abstract: Ecuadorian Immigrant Masculinity in the U.S.: Challenged Behaviors in the Host Country

People immigrating from Ecuador have to assimilate into a different lifestyle. Thus, immigrants are often forced to re-evaluate long-held self-conceptions to incorporate into the host country better. Using a social science lens (based on insights from psychology, sociology, and anthropology), I would like to explore how male notions of masculinity are challenged in the United States. Perspectives on social behavior are set from early childhood. They are placed on certain social expectations of being a man. Such expectations are being tough, homophobic, and acting manly. Cultural production such as musical lyrics, poems, and art often embodies male-centered perspectives. For instance, many Ecuadorian songs display a toxic masculinity mindset that reinforces men to be a leader, to provide financially for the family, and to have no emotional weakness towards people. Some ideas are represented as actions such as not crying, self-sacrifice, tough personality, and other behaviors that are normal in Ecuadorian culture. Exposure to this type of media has shaped the mental process, behavior, and cognition of a different era, and how immigrant masculinity is experienced among Ecuadorians residing in the USA. I expect to find a correlation between alcohol consumption and poor coping mechanisms, maladaptive behavior, and how gender roles fit into this idea of masculinity. I am seeking an understanding of a traditional and modernized model of masculinity to compare and contrast its rules.

Presentation Type: Essay

Student Presenter: Tamara Dillemath

Faculty Mentor: Prof. Christian Caminiti

Abstract: This personal essay illustrates a teenage girl's disdain for being picked up after school by her elderly grandfather. Fed up with her daily routine, the girl wishes for the freedom to travel home alone or with her friends. When she finally gets her wish, an unanticipated reality sets in and she realizes she may have taken the love of a family member for granted. Inspired by Chang-Rae Lee's "Coming Home Again," this personal narrative is both a loving recollection for an older family member and a cautionary tale about taking loved ones for granted.

Presentation Type: Essay

Student Presenter: Bridgette Soto

Faculty Mentor: Prof. Victor Torres-Velez

Abstract: Dominican identity

Presentation Type: Essay

Student Presenter: Nicole Pena

Faculty Mentor: Prof. William Casari

Abstract: This presentation will focus on prospective changes in the Bronx and is a project from the Bronx Beautiful capstone course.

Presentation Type: Essay

Concurrent Sessions

2:00-3:15 C-464

Moderators: Prof. Anna Ivanova and Lisanette Rosario

Student Presenter: Warrick Balfour

Faculty Mentor: Prof. Carlos Guevara

Abstract: Displaying how assistive technology can support students in middle school that have unique learning challenges. This project also focuses on teaching digital privacy and digital citizenship.

Presentation Type: Powerpoint

Student Presenter: Reinaldo Rafael Lopez

Faculty Mentor: Prof. Bianca Rivera-Pena

Abstract: Myelodysplastic syndrome (MDS) and Acute Myeloid Leukemia (AML) occur after accumulation of genetic and epigenetic alterations in hematopoietic stem cells (HSCs). Alterations in HSCs promote malignant transformation, giving rise to leukemic stem cells (LSCs). Existing therapies for MDS and AML have been unsuccessful in eliminating LSCs. Hence, molecular targeting of aberrant LSCs can be a strategy for developing targeted drugs capable of eliminating LSCs. Studies show that aberrant HSCs have altered cellular pathways, including overexpression of the signal transducer and activator of transcription 3 (STAT3). Our lab showed that MDS and AML patients have elevated levels of STAT3, and overexpression is associated with an adverse prognosis. An initial drug screen identified Pyrimethamine (PYR), FDA approved anti malaria drug, as a potential STAT3 inhibitor. Therefore, we are evaluating the efficacy of PYR for treatment of MDS and AML, including its efficacy in a hypomethylating agent (HMA) and Venetoclax (Ven) resistant model.

Presentation Type: Powerpoint

Student Presenter: Gladys Hughes, Emily Checo Genao

Faculty Mentor: Prof. Saadia Lgarch

Abstract: The endless search for innovation of humanity has brought the future even closer. Starting from the creation of electricity, the computer, the internet, and artificial intelligence, the creativity of humankind has led to advances in technology in the modern world, especially in the financial industry. The emergence of cryptocurrency leads to an increase in the way transactions among peers are done by eliminating the need for a mediator through the exchange of virtual currency. Through Blockchain, an intuitive encryption technology, cryptocurrency has evolved into a major financial currency exchange market. Today, cryptocurrencies like Bitcoin, Ethereum, and others are widely used by major businesses, government entities, and in the stock market. Through our research, we collected data from multiple sources for a better understanding of what cryptocurrency is, the technology behind it, its impact in our lives, and how it differs from the way traditional financial transactions are performed.

Presentation Type: Powerpoint

Student Presenter: Zainab Ajidele

Faculty Mentor: Prof. Damaris Lois-Lang

Abstract: What is reality? What constitutes existence? The quest for humans to understand existence, life, our world, and the universe has been viewed from varied lenses; spiritually/supernaturally, naturally/physically, socially/secularly, cognitively/mentally, consciously/soul, and beyond. These are all part of the human endeavors, experiences, and encounters that shape the conceptual ecologies of individuals in our societies. This research zeros in on the natural, social, and spiritual dimensions as contributors to human endeavors, experiences, and encounters to derive the possibility of providing integrative co-existence of their alternate concepts without necessitating mutual exclusivity in the understandings of shared phenomena from lenses of varied viewpoints across diverse dimensions.

The template of the Kuhns cycle paradigm will be employed as a framework across social structures, the concept of the creation story, and the theories of evolution, phylogeny, and speciation to explore content points to bring to bear the possibility of having an integrated co-existence of alternate concepts that belong to separate dimensions of the human endeavors, experiences, and encounters.

Presentation Type: Powerpoint

3:30-5:00 A – Atrium

The Music Connects Us event is an opportunity for people to share music that is special to them. Members of the Hostos community have submitted written responses as well as audio essays talking about songs that remind them of their family or culture. We will have live readings, listen to some recordings, raffle instruments to those in attendance, and end with a concert.

Emmanuel Diaz (Director, Piano, Synthesizer)

Jennifer Guzman (Singer)

Andres Frias (Piano, Synthesizer)

Nelson Tavares (Bass)

Jose Grullon (Drums)

