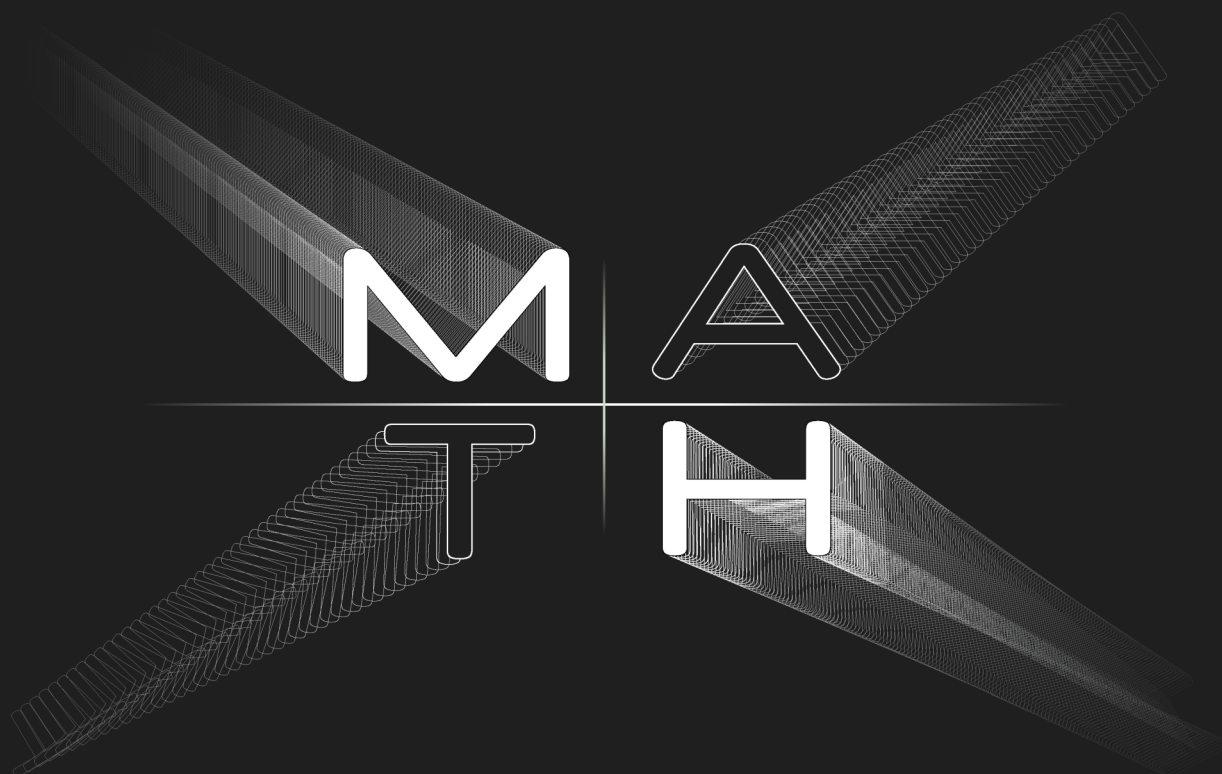


2022 OFFICIAL TECHNICAL PROGRAM

7TH ANNUAL MATHEMATICS DAY

@ HOSTOS COMMUNITY COLLEGE

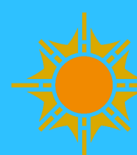


"THE ROLE OF MATHEMATICS EDUCATION IN A PERSON'S LIFE"

-A QUEST TO GAIN INSIGHT ON THE PURPOSE OF EDUCATION IN TODAY'S SOCIETY-

WEDNESDAY, MARCH 30TH, 2022 11:00AM - 3:30PM
ONLINE EVENT

REGISTRATION: [TINYURL.COM/MATHDAYHOSTOS](https://tinyurl.com/mathdayhostos)



Hostos Community
College



7th Annual Mathematics Day @ Hostos Community College

Virtual – Wednesday, March 30, 2022

The Role of Mathematics Education in a Person's Life

— A Quest to Gain Insight on the Purpose
of Education in Today's Society —

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ORGANIZING COMMITTEE

| | |
|-------------------------|--|
| Clara Nieto-Wire | Event Coordinator and Organizing Committee Chair |
| Nieves Angulo | Mathematics Department Chair |
| Moise Koffi | Mathematics Department Deputy Chair |
| Diandra Jugmoham | Registration and Sponsors Co-Coordinator |
| JungHang Lee | Interactive Activities & General Support |
| Amrit Singh | Interactive Activities & General Support |
| Gisselle Guzmán | Peer Leaders Integration |
| Dionicio Taveras | Adjunct Faculty Integration |
| Anders Stachelek | General Support |
| Tanvir Prince | General Support |
| Lisette Maspons | General Support |
| Ever-Lyn Oxley | General Support |

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| Juno Morrow | Media Design Coordinator at HCC |
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| Clara Nieto-Wire | Event Coordinator and Organizing Committee Chair |
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MATHEMATICS DAY

CHAIR'S CORNER

Dear participants,

Welcome to the **7th Annual Mathematics Day @ Hostos Community College.**

The purpose of this event is to highlight the relevance of Mathematics in all disciplines and aspects of life. The theme for this year is ***"The Role of Mathematics Education in a Person's Life – A Quest to Gain Insight on the Purpose of Education in Today's Society -"*** We aim to emphasize the importance of inclusion of all voices (students, faculty, administrators, diverse disciplines, etc.) to achieve the goal of the event.

The motivation for Mathematics Day has been typical questions and comments students share during math classes, such as, "Do I really need to learn this?", "Would I ever use this?", "I just need this class to graduate", "I just need a C."

It is clear that in many instances, we might not be aware of the benefits of a mathematical education, and furthermore, education in general. Often times education is thought of merely as a means to getting a degree that leads to a well-paid job.

As students at community colleges are trying to identify their career and life interests, we would like to engage our audience in a reflection of how powerful can education be when it is understood beyond just "getting a degree to get a job."

The question of why studying mathematics? has been around since ancient times. Presenters and panelist will share their thoughts on the theme, exemplify the impact of education in their personal journeys and their contributions to society, and share the thoughts of thinkers from other times with the audience.

One way or another we all experience mathematics in our lives and in society. Mathematics Day @ Hostos is an extraordinary opportunity to gather outside the classroom to share and discuss our experiences with mathematics and their impact in our lives. We are delighted that you have joined us in this conversation today.

Finally, I would like to express my deepest gratitude to all who made this event possible including, but not limited to, the Mathematics Day Organizing Committee, the Mathematics Department, all Collaborators and Sponsors. Thank you very much for all the wonderful work, and dedication to make this another successful celebration of Mathematics at Hostos Community College.

Sincerely,

Clara Nieto-Wire, Ph.D.
Mathematics Day @ HCC Event Coordinator &
Chair of the Organizing Committee



Program Director: Dr. Moise Koffi
 Program Co-Director: Mrs. Diandra Jugmohan
 Program Coordinator: Mrs. Briseida Cortez

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EVENT SCHEDULE

SESSION 1

11:00-12:15pm

Welcome

Dr. Clara Nieto-Wire, Event Coordinator and Chair of the Organizing Committee

Opening Remarks

Dr. Daisy Cocco De Filippis, President, HCC.

Dr. Shiang-Kwei Wang, Provost and Vice President for Academic Affairs, HCC.

Dr. Nieves Angulo, Chair of the Mathematics Department, HCC.

Mr. Brian Carter, President of the Student Government Association-SGA, HCC.

Faculty Presentations

♦ *"Mathematics in Literature and Philosophy: The Higher Form of the Real True"*
Dr. Victoria Munoz. (English Department, HCC)

♦ *"CHRONOS AND KAIROS: Two Different Ways of How We Grapple with Time"*
Dr. Karin Lundberg. (Language and Cognition Department, HCC)

Panel Discussion

"Voices from the Students: Mathematics - Personal Views and Experience"

Moderator: Dr. Claude Brathwaite. (Grove School of Engineering, CCNY)

Student Panelists:

Ms. Oumou Traore. (Cornell University, Alumni-HCC)

Ms. Mariam Koanda. (New Mexico Institute of Mining and Technology, Alumni-HCC)

Ms. Ebony Peguero. (Peer-Leader, Alumni-HCC)

Mr. Abdoul Bouda. (Peer-Leader, Alumni-HCC)

Mr. Blaise McNair. (Peer-Leader at HCC, Lehman College)

Interactive activities and demos.

♦ Kahoot: Prof. JungHang Lee & Prof. Amrit Singh. (Mathematics Department, HCC)

Prizes, open raffle and gifts.

SESSION 2

12:30-1:45pm

Welcome

Dr. Clara Nieto-Wire, Event Coordinator and Chair of the Organizing Committee

Opening Remarks

Dr. Nieves Angulo, Chair of the Mathematics Department, HCC

Faculty & Industry Presentations

♦ *"Degree Programs & Articulation Agreements in the Mathematics Department of Hostos Community College"*

Dr. Moise Koffi. (Mathematics Department, HCC)

♦ *"A Mathematics and Engineering Journey"*

Mr. Adrian Posada. (Systems Integration Analyst at Salesforce, Alumni-HCC)

- ◆ "How Can Mathematics Solve Problems in the Medical Field"
Dr. Gaffar Gailani. (Mechanical Engineering Technology Department, City Tech)
- ◆ "Mathematics – A Lifelong Friend"
Dr. Tanvir Prince. (Mathematics Department, HCC)
- ◆ "Mathematics – A Career Path in Biophysics from Sportsman to Scientist – A Rewarding Journey"
Dr. Yoel Rodríguez. (Natural Sciences Department, HCC)
- ◆ "Why Do I Study Mathematics Education? The Pursuit of Access, Opportunity, and Engagement"
Dr. Anders Stachelek (AJ). (Mathematics Department, HCC)

Interactive activities and demos.

- ◆ Kahoot: Prof. JungHang Lee & Prof. Amrit Singh. (Mathematics Department, HCC)

Prizes, open raffle and gifts.

SESSION 3

2:00-3:15pm

Welcome

Dr. Clara Nieto-Wire, Event Coordinator and Chair of the Organizing Committee

Opening Remarks

Dr. Nieves Angulo.
Chair of the Mathematics Department (Hostos CC)

Faculty Presentations

- ◆ "Infinity, Circles, God, and Perhaps Airplane Seats"
Dr. Thomas Beachdel. (Humanities Department, HCC)
- ◆ "Today's Mathematics"
Dr. Nathan Hosannah. (Mathematics, Engineering and Computer Science Department, LGCC)
- ◆ "Math?... ... Why? "
Dr. JungHang Lee. (Mathematics Department, HCC)

Panel Discussion

"Voices from the Faculty"

Moderator: Prof. Cynthia Jones. (English Department, HCC)

Faculty Panelists:

Dr. Jacqueline DiSanto. (Education Department, HCC)
Dr. Biao Jiang. (Natural Sciences Department, HCC)
Dr. Linda Hirsch. (English Department, HCC)
Dr. Carmen Inda Garcia. (Natural Sciences Department, HCC)
Dr. Ivan Retamoso. (Mathematics Department, BMCC)
Dr. N. Michel Hernández Valdés-Portela. (Behavioral and Social Sciences Department, HCC)

Interactive activities and demos.

- ◆ Kahoot: Prof. JungHang Lee & Prof. Amrit Singh. (Mathematics Department, HCC)

Prizes, open raffle and gifts.

Adjourn

PRESENTATION ABSTRACTS

SESSION 1

Mathematics in Literature and Philosophy: The Higher Form of the Real True

Presenter:

Dr. Victoria Munoz,

English Department, HCC-CUNY.

We often think of STEM and the humanities as polar opposites, but traditionally, these fields worked together in the human search for truth, which is the goal of all philosophy. According to classical philosophers, the purpose of mathematics was to test what is real in the knowable universe; some even used mathematics to prove that we are all possessed of immortal souls. The purpose of the humanities was correspondingly to convey these essential truths to other human beings so that they, too, could develop wisdom. This is why a liberal arts education involves both STEM and humanities courses as part of its core curriculum. This interdisciplinary talk uses the humanities to illustrate the importance of mathematics to our society and to our lives. Through close reading of excerpts from Plato's *The Republic* (375 BCE), Aristotle's *The Art of Rhetoric* (4th C. BCE), and Lewis Carroll's *Alice in Wonderland* (1865), I will show how mathematics determines what is real and true in the knowable universe, shaping reality itself. As new and groundbreaking developments in the fields of mathematics have changed the shape of the "real" and the "imaginary," so has our understanding of the universe and our place within it. Studying mathematics therefore helps to form enlightened individuals and wise leaders in a virtuous

and just society. "

CHRONOS AND KAIROS: Two Different Ways of How We Grapple with Time

Presenter:

Dr. Karin Lundberg,

Language and Cognition Department, HCC-CUNY.

Carpe Diem – Seize the Day! Many of us have heard this imperative phrase by the Roman poet Horace many times over. However, what do we exactly mean when we reiterate these words of wisdom from the ancient Romans? What makes us think we can "seize the day" and what is the purpose of such a phrase. Similarly, in the effort to explore both quantity and quality of time, the ancient Greeks needed both a God and the complex concept of Kairos to capture the functions of what all humans are trying to come to terms with: the idea of time. The Mayan culture and native American tribes, on the other hand, thought of time as a circular movement of different cycles. Through the lens of the Greeks, this presentation will explore the quantitative and qualitative aspects of time as they manifest themselves in as a vehicle for understanding and organization of our lives. It will lay out some of the main concepts of thinking about time, linear or circular, and describe how we use cognitive schemata to measure and evaluate time as a main component of our lives. In other words, to gain insight into how we perceive, measure and manage time, we use mathematical units and entities. We even seek empowerment through such instruments of control and distribution of what ultimately is a finite amount of time in any human life. Hence, "Seizing the day" constitutes both a qualitative and quantitative dimension and points to our mathematical faculties while we hold on to a meaningful, opportune moment just as the Greeks envisioned the idea of Kairos.

SESSION 2

Degree Programs & Articulation Agreements in the Mathematics Department of Hostos Community College

Presenter:

Dr. Moise Koffi,

Mathematics Department, HCC-CUNY.

The objective of this presentation is to introduce our students to the variety of degree programs offered by the Mathematics Department at Hostos, which include articula-

tion agreements with 4- year degree granting institutions. The sequence of mathematics courses offered to students for successful completion of their degree at Hostos, depending on their majors will be discussed. An overview of key resources and extra-curricular activities available at the institution will be provided in order to foster their intellectual growth leading to their social mobility.

A Mathematics and Engineering Journey

Presenter:

Mr. Adrian Posada,

Systems Integration Analyst at Salesforce & Alumni-HCC-CUNY.

In this presentation, I will share my interest in mathematics which started early on while working on physics projects while attending Pablo Neruda Academy, a high school in the Stevenson campus in the Bronx. Then, I will share my mathematical journey through my academic and professional career as a NASA research scholar, when I first encountered the field of Complex Dynamics while working as an LSAMP Scholar under the guidance of Dr. Ross Flek at Hostos Community College. After graduating from Hostos, I joined the CCNY Computer Vision lab, working on various projects under Dr. Zhigang Zhu and Dr. Edgardo Molina. At the lab, I used the knowledge of linear algebra, vector analysis, programming, and wireless technologies to address the navigation challenge for the visually impaired while working completing my undergraduate degree at City College. Finally, in my current profession as an Integration Engineer, I use Mathematics to determine software system output under different hardware resources stress conditions to determine the optimal operations in complex software architectures.

How Can Mathematics Solve Problems in the Medical Field

Presenter:

Dr. Gaffar Gailani,

Mechanical Engineering Technology Department, City Tech-CUNY.

Math plays a critical role in our life but we don't see this most of the times. In the medical field and biology mathematical modeling has significant contribution in answering some of the key problems in Medicine and Biology. In this short presentation, I will go over my personal experience throughout journey as a student and professor in using mathematics to provide answers to some questions in the

medical field .

Mathematics – A Lifelong Friend

Presenter:

Dr. Tanvir Prince,

Mathematics Department, HCC-CUNY.

In this very short presentation, I will try to demonstrate why and how mathematics is used in everyday life. Also, I will explain how Mathematics education can empower people to overcome social and emotional barrier in education and be successful in both professional and personal life. I always view Mathematics as one of my best friends. After the presentation, I hope that you may at least consider Mathematics as one of your friends.

Mathematics – A Career Path in Biophysics from Sportsman to Scientist – A Rewarding Journey

Presenter:

Dr. Yoel Rodríguez,

Natural Sciences Department, HCC-CUNY.

Dr. Yoel Rodríguez will share his career path to become a theoretical biophysicist and university professor. First, he will share how important sport has been in his life to help building character as human being, developing critical thinking, endurance, perseverance, and being a good team player. Second, Dr. Rodríguez will also discuss how the thirst for new knowledge and discovery helped him fall in love with math, physics, chemistry, biology, and sciences, in general. Finally, he will explore the challenges, frustrations, and joyfulness that trigger what we would call a rewarding journey.

Why Do I Study Mathematics Education? The Pursuit of Access, Opportunity, and Engagement

Presenter:

Dr. Anders Stachelek (AJ),

Mathematics Department, HCC-CCNY.

Join me as I outline my individual journey from my initial love of mathematics, to my struggles in seeing myself as a mathematics learner, and finally to my career choice of becoming a mathematics educator. Not only will I share how my journey began, but I will also share the ways in which my work in mathematics education impacts the actu-

al lives of individuals like you! The major questions that will be explored in this presentation are: 1) Who gets access to which level/types of mathematics? 2) What opportunities and activities exist for students (i.e. you) to engage in mathematics? and 3) How can we encourage students (i.e. you!) to truly engage in mathematics?

SESSION 3

Infinity, Circles, God, and Perhaps Airplane Seats

Presenter:

Dr. Thomas Beachdel,

Humanities Department, HCC-CUNY.

This talk examines abstract and concrete mathematical thinking in the global humanities. With examples drawn from a range of cultural sources, ideas relating to infinity, circles, and proportion are presented as a means of discovering mathematical concepts in humanistic thought.



Casper David Friedrich, Monk By The Sea, 1808-10

Today's Mathematics

Presenter:

Dr. Nathan Hosannah,

Mathematics, Engineering and Computer Science Department, LGCC-CUNY.

During this discussion, Dr. Hosannah will explore the connections between math, science, engineering, and art, defining success for yourself while pursuing both career and personal passions, and the art of adaptation.

Math?... Why?

Presenter:

Dr. JungHang Lee,

Mathematics Department, HCC-CUNY.

This presentation investigates a simple but very important question, “why do we teach and study mathematics?”. Mathematics occupies a favored place in the school education system. It is one of the main subject areas that no student can evade. Starting from pre-k to college, we spend myriad hours and resources to teach and learn mathematics as a society as well as an individual. Even long before Euclid wrote the book, Elements in 300 BC, we have not stopped teaching and learning mathematics. This presentation provides an important question of why do we learn mathematics and the chance to think and re-think.

INTERACTIVE ACTIVITIES & DEMOS

Math in Interactive Activities

(one in each session)

Presenter:

Dr. JungHang Lee and Prof. Amrit Singh,

Mathematics Department, HCC-CUNY.

Kahoot Collaboration is designed to showcase interactive activities in any classes or presentations. It is a game-based learning platform, used as educational technology in any educational setting. Kahoots are user-generated multiple-choice quizzes that can be accessed via a web browser or the Kahoot app. At the end of each session, we are going to have a Kahoot activity with big prizes. This activity will demonstrate learning can be fun and exciting just like playing a game.



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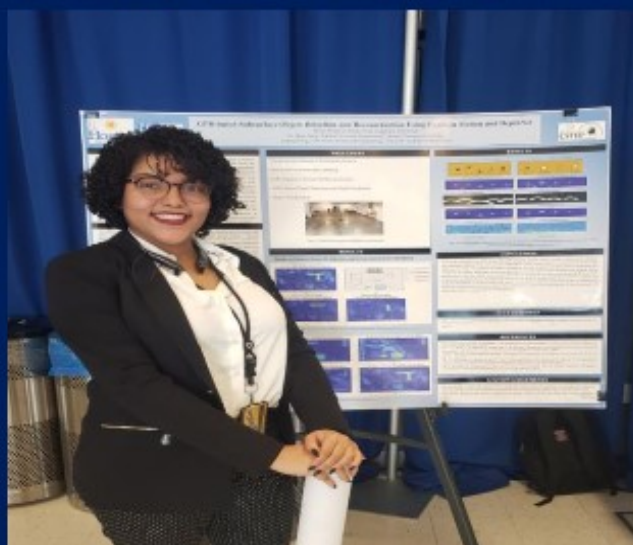
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Prof. Reginald Dorcely: rdorcely@hostos.cuny.edu - CSTEP Research Coordinator

STUDENT PANEL

Voices from the Students: Mathematics - Personal Views and Experience

This is a panel in which Hostos students and alumni will share their experiences with Mathematics. They will share what challenges they have encountered along the way and how they overcame them. Student panelists will also share with the audience their advice on how to succeed in Mathematics and the importance of Mathematics in achieving their dreams (personally, academically, and professionally). Questions from the audience will be encouraged and allowed as much as time permits.

Ms. Oumou Traore - Cornell University, Alumni-HCC.

I developed a love for mathematics from an early age as it was an interest that I inherited from my father. I see math as a tool developed in the interest to create grounds for reasoning that are almost hermetic to subjectivities; as a science that lives in the traits of nature, whether in the form of geometrical shapes or in natural processes. Math is present in many areas and even where it is absent, its logic is still used. Understanding the language of numbers is a powerful tool in communicating and understanding the world and it is a powerful tool that we could use in the service of the people and the communities we love.

Ms. Mariam Koanda - New Mexico Institute of Mining and Technology, Alumni-HCC.

The Role of Mathematics in My Life

I'm not sure how much I should spend today. How long will it take me to finish this assignment? Do I ever use my math? Such thoughts frequently cross our minds. Math is the straightforward answer to such a query.

According to some people, math is the application of intricate formulas and calculations that will never be used in real life. For instance, our daily plan is managed using simple mathematical ideas. In addition, Math is a universal language and a distinct subject in and of itself. Lastly, in my career diving into mining engineering, mathematical notions are always obeyed in all my courses. Mostly to study the crystallography of a mineral, for mapping, planning, and designing open pit and underground mining.

My field of study exemplifies how society is completely reliant on the processing of minerals used in designing and building technology, as well as the importance of mathematics to achieve it. My passion to pursue a career in mining engineering is enhanced by the challenges associated with sustainable resource development while mitigating impacts on the environment. I plan to emphasize fields of economic geology and valuation of minerals as well as mine planning and design, in which my mathematics skills are very important.

However, you will be impressed that mathematics is the foundation for all subjects and related to other subjects. Every topic, including physics, chemistry, economics, history, accounting, and statistics, is founded on arithmetic. So, the next time you remark, that you are done with mathematics, keep in mind that this subject will not abandon you.

Ms. Ebony Peguero - Peer-Leader, Alumni-HCC.

If there is something that I have learned with the years, it is that Math is more than numbers, a subject, or a course. Mathematics is a profound tool that we use on the daily basis; it can be said that the world runs thanks to Mathematics and its various application. During my years of experience working as a Peer Leader in the Mathematics department and Supplemental Instruction Program, at Hostos Community College, I witnessed students constantly complain and express that Mathematics was "useless" to them. These particular students continuously questioned everything about the composition of Mathematics and asked questions such as: "Why do they need to take math courses? How is math related to their majors? How was math useful in their lives?". The fact is, that even though they did not see it at that moment, Mathematics has a role in our lives. Some of the Mathematics purposes are help us to make sense of numbers, help us to solve real life problems by creating different types of mathematical equations or by reasoning, Mathematics also teaches us how to analyze, interpret, represent, and organize any kind of data. Mathematics can be described as a discipline that help us to train and organize our brain and intelligence through reasoning. Overall, Mathematics helps us to develop our critical thinking, make sense of thing and construct viable arguments. One of the reasons I chose to become a Math Educator is to continue demonstrating, exploring, and delivering the beauty behind math. I want to teach my students that there is not a reason why to be afraid of or reject math.

Mr. Abdoul Bouda - Peer-Leader, Alumni-HCC.

Mathematics has been my favorite subject since primary school. My grandmother used to say that I liked counting, separating, and sharing things equally when I was a child. In middle school, as I learned the Pythagorean theorem, polygons and the Egyptian pyramids, everything became interesting, and I began to see math everywhere.

I went to Mining and Quarry Engineering School after high school. There, I started to realize that mathematics is a language to better study nature and its knowledge can truly ease life remarkably. During my internships or the 2 years of employment in an industrial mining company, mathematical application was one of the basics and fundamental components of the exploration, mineral localization, quantification, and deposits purification.

When I came to the U.S, I wanted to stop working in the bush with big machines to work and interact with people. That is why I became a mathematics' Peer Leader. I wanted to show those who say "math is not my thing" that ever since the day they have started to breath in and out, God has put Mathematical reasoning ability in them that they are now using without noticing it.

The fact that Mathematics is everywhere, I'm able to compute data in Neuroscience lab settings, assist my lab mates and professors. I firmly believe that Mathematics helps me manage my life, in terms of my openness to the external world, emotional stability, financial management, and networking. It set me up for success as I'm starting my graduate Journey .

Mr. Blaise McNair - Peer-Leader at HCC, Lehman College.

As a child and young adult, Mathematics was far from my favorite subject. However, Math was the subject I needed to master in order to chase my dreams. I always loved Science, and saw myself enrolling in college to become a pre-health student. However, at the end of high school, I failed Pre-Calculus, as I could not make sense of Logarithms, among other things. By the time I made it to college, this knowledge gap came back to haunt me, as I failed Chemistry - twice. Needless to say, by the time my Freshman year was over, both my GPA and I were in rough shape. While General Chemistry is a science class, it relies highly on Mathematics concepts. As someone who did not feel confident in my skills in Math, I felt that my path becoming a clinical health professional had come to an end, as the aforementioned classes were necessary in order to continue on this pathway.

After coming to this realization, I decided to move on with my life and start anew. I found a new major, Sociology, and became enamored with learning about social structure, and how systematic inequality affects numerous aspects of our lives, including our healthcare and health outcomes. After graduating from college, I

completed a Master of Public Administration (MPA) with a concentration in Health Policy where I learned how to translate this understanding of social structure into actionable leadership and managerial duties in the public sector. While I was studying for my MPA, and through the years after graduation, I built a successful, progressively responsible career in the nonprofit/ social services sector. However, in the back of my mind, I think I always knew something was missing.

In March 2020, our city, and soon, our country and world found themselves wrestling with the fallout of the COVID-19 pandemic. Some businesses pivoted while others closed, we sheltered in place, and the world as we knew it would never be the same again. Living near Hostos and Lincoln Hospital, I heard and saw the convoys of ambulances bringing patients to the hospital for emergency care throughout March and the many months that followed. Catalyzed by the presence of long-ignored Social Determinants of Health and a laundry list of other structural inequities, COVID-19 was decimating Communities of Color throughout the Bronx, New York City, and our nation overall. As this took place, I felt something change inside of me, inspiring me to be able to support direct patient care in ways that could not be satisfied via administrative management. At that point, I knew that it was time for a career change.

However, in order to make this happen, I had to face my old friend, Mathematics. After enrolling as a visiting student at Hostos, my first order of business was to take and master Precalculus. With the help of Peer Leader, Abdoul Bouda, I successfully took and passed this class. Once Precalculus was behind me, my next step was to take Calculus. Under the diligent instruction of Dr. Clara Nieto-Wire, and her Peer Leader, Wendin-manenge Daniel Sawadogo, I took and passed Calculus as well. It took many hours of studying, asking many questions, spending time with her Peer Leader and in office hours, along with some blood, sweat and tears, but I made it.

Armed with the skills I learned from these classes, I finally felt ready to tackle Chemistry again. In Summer 2021, 14 years, 2 degrees, and an entire career after failing General Chemistry, I passed with an A. There is no way I could have done this without getting the training in Mathematics I received at Hostos. I used the understanding of Logarithms that I mastered in Precalculus to calculate pH. By understanding Derivatives in Calculus, I could successfully grasp the concept of Acid-Base titration. At this time, I am finishing up Organic Chemistry, and am using my understanding of Integration, also from Calculus, in order to better conceptualize Nuclear Magnetic Resonance Spectroscopy. By the end of the Spring 2022 semester, I will have completed the bulk of my pre-health coursework; my old dream finally seems to be within reach.

When I was nominated to interview for the position of Peer Leader, at first I chuckled. Math was always a struggle for me, and I found the prospect of interviewing for a job helping other students to learn this subject to be quite a bit ironic. However, after reflecting on my experience, I knew that I had to do it. The support that I received at Hostos Community College, especially from Dr. Nieto-Wire, Mr. Bouda, and Mr. Sawadogo were invaluable. While I would not be where I am now if it were not for them, there is no way I could pay them back for their help. However, by working as a Peer Leader, I could certainly pay it forward and help other students.

At this time, I am in my second semester working as a Peer Leader in the Mathematics Department at Hostos. While it can be challenging at times to balance this job with my coursework, it is more rewarding than I could have ever imagined. I relish the opportunity to help other students who may be struggling with Math as an undergraduate student. Also, I love that I have the latitude and flexibility to find creative ways to link Mathematics to concepts in Science as well as other disciplines, including Sociology and Public Administration. I think that drawing these connections helps to keep students engaged in class, especially if they can see how the topics we cover can be applied to future scenarios.

I am eternally grateful to Dr. Nieto-Wire, Mr. Bouda, and Mr. Sawadogo for all the help they have given me in my journey through Mathematics and back to the Sciences. I am also grateful to Ms. Silvia Reyes, Ms. Ebony Peguero and the Supplemental Instruction and Mathematics Departments at Hostos Community College for the opportunity to be able to work as a Peer Leader and support other students in their own respective journeys through learning. Finally, I would like to thank Professor Amrit Singh for his patience and guidance through my first semester serving as a Peer Leader at Hostos. By making Mathematics fun, relevant, and applicable, I hope to continue supporting and inspiring more students to reach for and achieve their dreams. They deserve the best that this life has to offer. In fact, we all do!



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FACULTY PANEL

Voices from the Faculty: Mathematics - Personal Views and Experience

Panelists will share their views on the impact of Mathematics in their lives, and discuss how mathematics aids advancement at different levels: personal, professional, social, technical, etc. The purpose of this panel is also to explore the importance of Mathematics from different perspectives and disciplines, and to raise awareness of the benefits of being proficient in Mathematics. Questions from the audience will be encouraged and allowed as much as time permits.

Dr. Jacqueline DiSanto - Education Department, HCC.

I often hear from my students that they want to take their Math class at the end of their degree program or that they really don't want to take Math if they can avoid it. When I ask why, the responses range from "I hate it" to "I cannot do it because I am not good at it". It makes me sad to think that no one inspired the mathematician in them at a young age by showing them that numbers and inquiry are fun. The Role of Mathematics in my Life is one of being my saving grace. I am not a morning person and I thrive on the adrenal rush of having a looming deadline (especially while having a bit of coffee at the same time). I do math the minute I reach for my alarm--How much time do I have? What does my schedule look like? Is there traffic? Do I have enough gas in my car? All of these questions have to be answered before I can even get up. As a chair, coordinator, and instructor, my main roles center on sharing information, providing long-range advisement, and helping students problem solve, all requiring more math. During a workshop last year, I learned that everything--EVERYTHING!--comes down to an algorithm. It was an eye-opener for me. We actually had fun re-working directions and predicting what we needed to do to make something work. Every young learner deserves a chance to do what we got to do in these workshops--play with math, be creative with problems, see beauty in geometry, and become aware of the math skills they innately have before they even take their first Math test.

Dr. Biao Jiang – Natural Sciences Department, HCC

Math for life: In our daily life, we use math to do simple and necessary calculations, when we want to evaluate, weigh or measure something, we can observe the application of math, although it may not seem like it, some fields unnoticed. It happens in other scientific fields such as psychology, economics, or the arts. In sculpture and painting proportions can be calculated using math, in music harmonic intervals can be reached by it too.

Mathematics provides many benefits for our mental development. Although it seems boring, abstract, and difficult to understand, if you make the effort to understand it, it can give us better analytical and agile thinking. Improving analytical thinking will help us better interpret everything around us. This will help us pay more attention to mistakes and be able to better analyze evidence without being confused by emotions. This will allow us to see everything more clearly and logically, given the actual data. As many people always mention, the core purpose of mathematics education, in addition to providing tools for solving problems, is to exercise people's logical thinking ability. Essence, and then rely on multiple assumptions and logical deductions to predict all possibilities of the development of things, and finally solve the problem.

Even simple business behaviors are accompanied by rigorous mathematical principles, such as discounts, half price for the second cup, buy two get one free, etc. Although many times when discount decisions are made, they may not necessarily be very rigorous. However, it is often a complete mathematical process after a simple calculation of figures such as selling price, cost, profit margin, and activity time scale.

I'm from China and I'm here to talk about math education in China. Compared with the United States, mathematics education in China is much more difficult for the same grade of mathematics courses. For example, many American junior high school mathematics knowledges will be completed in China's primary school. However, the Chinese model is not better than the American model. This kind of mathematics education is useless for most students, that is to say, it will never be used in the future.

Although the progress of mathematics education in the United States is relatively slow when children are young, it leaves time for children to think. This advantage can be reflected in the university. I think this is also the reason why Western universities have produced many excellent mathematicians. Of course, China's mathematics education also has certain advantages. Most of the children have a very solid foundation in mathematics, and they can complete basic mathematical operations relatively quickly. Mathematics education in China is also evolving, and I think mathematics education in the United States is also paying more attention to the basics. I believe that the mathematics education of the two countries will complement each other's strengths and will reach a new height in the near future.

Professor Linda Hirsch - Director of the A.A. Degree in Liberal Arts & Science English Department, HCC.

Math and a Free Society

"Why should I study the liberal arts? I'm a STEM major."

"Why should I study math? I'm a liberal arts student."

Liberal arts students often don't see a reason to study math, in the same way that science and math students often don't see a reason to study the liberal arts. What we all tend to forget is that math is actually one of the liberal arts. The word "liberal" comes from the Greek "eleutherios," meaning "free." The ancient Romans coined the term liberal arts to refer to the studies that they thought were appropriate for free men, but not for slaves.

As Justin Shelby explains in his article, "Defining the Liberal Arts," the "freedom" that liberal education refers to is not the freedom to choose and do what you like, but the opportunity to do and learn what is necessary to become useful as a free person, that is, not a slave.

The "liberal arts" then, are the basic skills and knowledge citizens need to function as contributing members to their society. These skills include the capacity to learn, to reason, and to communicate well both orally and in writing.

It's true you won't be asked to use trigonometry on a daily basis (or maybe not at all), so why should math be part of our skills base? Let me begin by saying math was not my strongest subject but not my weakest either. I went to a high school in New York City where admission was partly based on aptitude in math, so I must have shown some aptitude, at least on the day I took the test. My first course in high school was geometry. In "The Mathematician's Lament," mathematician and teacher Paul Lockhart refers to geometry as "an instrument of the devil," and my initial experiences with geometry made it seem that way to me, though not for the same reasons as Lockhart. I couldn't connect axioms to proofs for months and was not doing well. And then one day it all made perfect sense. I don't know how I had that breakthrough, but to this day I recall that the square on the hypotenuse is equal to the sum of the squares on the other two sides, and that a straight line is the shortest distance between two points, although I've read somewhere that that might not be true.

Can we function in society without a knowledge of math? Aside from basic mathematics, the study of math enables us to not only construct a logical argument, but also to recognize one. Mathematicians say math is more than memorizing facts. Good math education should encourage exploration and discovery, much as

reading a great novel doesn't just confirm what we already know but opens us up to new possibilities. Mathematicians remind us that concepts such as unity, truth, beauty and causality arise naturally in mathematics. An article in the March 22nd New York Times examines the argument that our innate ability to imagine and understand shapes is what make us uniquely human.

I've been thinking about the facets of our lives in which a knowledge of math is fundamental to living wisely. A few that come to mind:

- ♦ Personal finance including loans – credit card interest rates, student loans, car loans, home loans, personal and business loans. How do interest rates affect what I pay?
- ♦ In the simplest examples, yet ones that occur frequently, when I'm shopping, should I use the 20% off coupon or the \$15 dollars off an item? Should I use frequent flyer miles or pay cash for a trip? Which way saves me money?
- ♦ Politics – Did you understand the ranked voting used in the last New York City mayoral primary? What makes voting systems and representations fair or unfair? Do politicians use facts to build logical arguments? Are their positions sound, logical and consistent?
- ♦ What is "fake news," and how do I determine the fake from the real?
- ♦ What is true? What is false? Is there such a thing as kind of true or false? Do "alternative facts" really exist as President Trump's spokesperson once said?

Though I am not a math major, I can't imagine not having a grounding in math and for that matter, the liberal arts. Our academic disciplines are becoming increasingly isolated. We are losing sense of the value of higher education – its purpose to educate and expose us to concepts and ideas we won't discover elsewhere and that we need to meet the demands of living in a democracy. I know enough about mathematics to know there is a beauty to it. Albert Einstein observed that science and the liberal arts are, "branches from the same tree." I wish you the kind of education that allows you to experience this connection and that enables you to not only forge your career path but to also obtain the exposure to ideas and subjects that will enrich your lives. You deserve no less.

Dr. Carmen Inda García - Natural Sciences Department, HCC.

The Role of Mathematics Education in a Person's Life

Exploring the world around us requires the ability to use Math. Analyzing experimental data that might present significant differences leading to scientific results and research conclusions relies on Math.

When I entered for the first time a research laboratory, I realized how important Math is for the analysis of scientific processes. The quantification of the distribution of neurons in the human brain, protein levels in samples, the analysis of the electromyography of the eyelid responses in mice, the measurements of different behavioral tasks in memory processes are examples of scientific methods where Math is fundamental.

During my graduate studies, I retook courses to reinforce my knowledge of Math and statistics, which allowed me to analyze the data of my experiments.

As a professor, I believe the lack of foundation in Math may prevent students from succeeding in science programs. Math gives students the analytic tool to understand biological processes. In my Anatomy & Physiology and General Biology classes, I explain Mathematical concepts. Math in my Biology classes supports students' development of analytical/synthesis skills on the scientific topic.

I encourage you, Hostos students, to take advantage of the education you are receiving here at Hostos to open new opportunities for your future careers. To make sure you fully understand Math, practice, and develop a solid foundation. Identify the specific issue/difficulty you are facing and work on it, expending more time, asking tutors, getting back to the Mathematical basics if needed. You will be able to use Math as a tool in every field of study you decide to take.

Dr. Ivan Retamoso - Mathematics Department, BMCC.

The Role of Mathematics Education in a Person's Life

As our world changes and is reaching a level of complexity, never seen before, Mathematics has become the “universal tool” we cannot live without, in our modern societies Mathematics is embedded in almost all our activities, we just do not notice it, Data Science, Machine Learning, Artificial Intelligence, Bitcoins, they all have Mathematics in their foundations, they are the results of “Mathematics put to work”.

No matter what career you are pursuing, once you start working in your field, you will have to follow protocols based on logical reasoning, it is here where your mathematical framework acquired during your years in college can help you, for example, in the same way you followed logical steps to solve an equation you can follow instructions to accomplish complicated tasks by breaking them down into simpler subtasks, you will be considered to be highly trainable, which in turn will add value to your career and to your life.

Mathematics empowers you, gives structure to your life, improves your reasoning skills, sharpens your mind, teaches you to acknowledge when you are wrong, and helps you become a better decision-maker.

Below are some quotes from great thinkers

“The book of nature is written in the language of Mathematics”

— Galileo

“The knowledge at which geometry aims is eternal”

— Plato

“The why of things is extremely important”

— Elon Musk

Dr. N. Michel Hernández Valdés-Portela - Behavioral and Social Sciences Department, HCC.

Economics is a social science that uses mathematics because of its ability to summarize and demonstrate human behavior. It deals with understanding the causes and consequences of socio-economic situations in individuals, institutions, and society. This is what brings students to my classroom, but the presence of mathematics makes them afraid of my class. Teaching introductory economics makes the student realize that mathematics is just a new language, as concise as TikTok or Twitter, where numbers and graphs show a snapshot of the reality they all live and its logic. They are a toolset that prepares them to understand the personal economic consequences that situations such as the current pandemic could have had on their employment, income, and their everyday life restrictions.



HOSTOS ENGINEERING ACADEMIC TALENT (HEAT) SCHOLARSHIP PROGRAM*



The National Science Foundation's **Hostos Engineering Academic Talent Scholarship Program**, also known as **HEAT**, will contribute to the national need for well-educated STEM professionals. The project's goal is to support the retention and graduation of high-achieving, low-income Hostos Community College (HCC) students with demonstrated financial need, and work in partnership with The City College of New York's Grove School of Engineering (CCNY's GSoE).

HEAT Scholars will receive financial support for up to four years (up to two years at Hostos, \$2,000 per semester; and up to two years at GSoE, \$3,500 per semester). Support is based on scholars' unmet financial need.

<https://www.hostos.cuny.edu/HEAT>

Application: <http://www.hostos.cuny.edu/HEAT/APPLY>

Contact Information:

Luis Tejeda Ortiz, B.E. ChE
Program Assistant
Room A-507R
[nsfstemheat@hostos.cuny.edu](mailto:nfstemheat@hostos.cuny.edu)

Eligibilities:

Students must

- be U.S. Citizens, U.S. Permanent Residents, U.S. Nationals, or Refugees;
- be enrolled in one of the Joint Dual Engineering Degree majors;
- have an overall GPA of 3.0 and a minimum College Math and Science GPA of 3.0;
- be a low-income student with demonstrated financial need as per the Financial Aid Office. Support is based on the scholars' unmet financial need.

HEAT Scholars Benefits

- Mentored by peers and dedicated STEM faculty;
- Enrolled in writing across disciplines in the STEM curriculum;
- Immersive undergraduate research experiences;
- Guidance and support for transfer to a four-year institution;
- Exposure to STEM-related working and professional facilities;
- Participation at professional STEM conferences; and
- Career orientation workshops and other professional development opportunities.

*NSF STEM Award: DUE – 1833767



Hostos Black Male Initiative Together wE Achieve More

Hostos BMI TEAM is a CUNY wide program designed to enhance the experience of underrepresented incoming freshmen and upperclassmen, particularly Black and Latinx STEM majors. Through mentoring, tutoring, and networking, **BMI TEAM** hopes to instill the key skills and values necessary to ensure future success as members move forward in their studies and careers. **TEAM** stands for **T**ogether **wE** **A**chieve **M**ore emphasizing the community that will be built and the subsequent possibilities that will open up for every member. This community will be born from the shared backgrounds and experiences of members.

<https://www.hostos.cuny.edu/Administrative-Offices/Office-of-Academic-Affairs/Dual-Degree-Program/BMI-TEAM>

Application: <https://www.surveymonkey.com/r/FHVCYVV>

Contact Information:

Chistian Huacón, Program Co-Coordinator
Luis Tejeda Ortiz, Program Co-Coordinator
Room A-417/418
hostosbmiteam@hostos.cuny.edu

Eligibilities:

- Hostos STEM students, particularly engineering students

BMI TEAM Members Benefits:

- Mentored by advanced peers;
- Tutored by advance peers;
- STEM Boot Camps; getting acquainted with threshold concepts including Chemistry, Physics, Electrical Circuits, Statics, AutoCAD, MATLAB, Python, and so forth;
- Guidance and support for transfer to a four-year institution;
- Career orientation workshops and other professional development opportunities.



BIOGRAPHICAL PROFILES

NIEVES ANGULO

Dr. Nieves Angulo is a Professor and the first female Chair in the Mathematics Department at Hostos Community College (HCC). She has taught Mathematics for over 30 years. She truly believes that any student coming through the doors of HCC is capable of achieving a college education. Dr. Angulo's professional life has been very rich and fulfilling. She has served as the Deputy Chair of the Math Dept, Director of the (Serrano) Honors Program, worked in the development and the implementation of the Dual/Joint Engineering Program with City College, etc. She had done research at The Metro-Math: The Center for Mathematics in America's Cities at the Graduate Center which researched the mathematics component of the New York City Teaching Fellows Program. Also, Dr. Angulo has worked on numerous grants aimed to increase the number of underrepresented minorities in the STEM fields while taking and doing research with Hostos students at NASA-Marshall Space Flight Center, in Huntsville, Alabama during the summer months. She is currently the CoPI of the NSF S-STEM "Hostos Engineering Academic Talent" (HEAT) program. At the center of all the positions and activities that she has been involved, her students have been and are the driving force in her professional life .

THOMAS BEACHDEL

Thomas Beachdel, PhD is an art historian and Associate Professor at Hostos in the Humanities Department. He maintains an active scholarly role in international contem-

porary practice as author, researcher, curator, and lecturer. His critically acclaimed book with artist Marie Tomanova, New York New York, was released in 2021 with the esteemed German publishing house Hatje Cantz. In September 2022 he will publish by invitation with SuperLabo (Tokyo), It was Once My Universe, a scholarly artist monograph focused on themes of identity and immigration. His interests also focus on landscape aesthetics/ideologies between the seventeenth and twentieth centuries, particularly the sublime. He is currently working on two additional book projects, "Wrecks, Ruins, and Eruptions: The Visual Culture of the Sublime in the Long Eighteenth Century," and on an edited anthology, "Landscape of Disaster."

CLAUDE BRATHWAITE

Dr. Claude Brathwaite currently serves as the Director of Student Resources and Services at the City College Grove School of Engineering, utilizing a model of High Impact Practices and Engagement (HIPE). Dr. Brathwaite previously served as the Project Administrator and later Executive Director of the NYC Louis Stokes Alliance. He has also served as the Deputy Director of the City College Black Studies Program, the Director of the City College Black Male Leadership and Mentoring Program, and has taught courses in Black Studies and Chemistry at the City College. At the NYC Alliance, he oversaw the day-to-day operation of the NYC Alliance programming across the 18 participating campuses at the City University of New York for 20 years. He has designed and implemented programs and activities to enhance the students' experience such as the LSAMP International Research and Training Opportunities resulting in partnerships in Sweden, Austria, the Netherlands, Colombia, Brazil, Morocco, Japan and China, and the Science and Society Summer Seminar Course: Science and Engineering Technologies 25 years into the Future (Science Division with University of Graz/Technical University-Graz Austria). Dr. Brathwaite began his college education at Hostos Community College, received his BS in Chemistry from the City College of New York and his Ph.D. in Organic Chemistry from the Graduate Center of CUNY. He served as a Chancellors Fellow, and conducted additional postdoctoral training at Weill Cornell in the Division of Molecular Medicine.

ABDOUL BOUDA

Abdoul Bouda has graduated from Queens College, with a B.A in Neuroscience & Biology and a BA in Psychology.

He also minored in Physics and Urban studies. He was a MARC student and his research was looking at how chronic pain affects the brain vascular permeability changes and the blood flow. He worked as a Public Health Advisor for the New York City Health Department where he participated in the COVID-19 test and trace program. He is also a teaching assistant at Hostos Community college Mathematics department where he supported students in understanding their class materials. In addition, he is currently a research assistant in a study examining the effects of computerized cognitive training on the mood, cognition, daily functioning, and fMRI data on young adults with depression. He is planning to enter graduate school with the end goal of becoming a Medical Scientist. He likes reading and most importantly he enjoys exploring new horizons and loves interacting with diverse groups of people.

JACQUELINE DISANTO

Jacqueline M. DiSanto is professor, chair of Education Department, and coordinator of Teacher Education. Her degrees include a P.D. in Administration and Supervision and an Ed.D. in Instructional Leadership. She serves as Academic Integrity Officer and as co-chair of ETLC at Hostos. In 2020, Professor DiSanto was PI on a project funded under a CUNY Robin Hood Foundation, which supported the re-design of EDU 226 Intro to Instructional Technology to meet the current needs of pre-service teachers by incorporating computer literacy, computational thinking, and universal design for learning into the curriculum. Her current granted-funded projects include a mentorship program for mid-career faculty and an investigation into an agnostic teaching approach that identifies universal strategies and resources that are effective across the teaching modalities. Professor DiSanto represents Hostos at the Common Core Course Review Committee, which reviews and approves Pathways courses, and serves on the New York City Montessori School Board of Trustees. Her favorite role at Hostos, however, is serving her students and watching their dreams come true.

GAFFAR GAILANI

Gaffar Gailani is a professor of Mechanical Engineering at Mechanical Engineering Technology Dept at New York City College of Technology (City Tech) of CUNY. He is also the founder and director of the Center of Medical Devices and Additive Manufacturing at City Tech. He received his master's and PhD degrees from the City College

of New York and his bachelor's degree from the University of Khartoum in Sudan.

N. MICHEL HERNÁNDEZ VALDÉS-PORTELA

Norberto Michel Hernández Valdés-Portela is an economist whose work focuses on the political economy of higher education and development economics. His research and teaching in economics go back to the early 2000s and involve experiences in three different countries: Cuba, the United Kingdom, and the United States. Most of his work in the first two countries involved studying the factors that affect country-focused development, concentrating on comparative studies in economic growth and economic thought. After joining Hostos Community College in 2010, he got acquainted with the community college concept in the United States and the population served by these institutions. As a result, his new passion delves around the cross-sectional perspective that explains the factors affecting social mobility in community college students and the access of Hispanic Americans and Hispanic immigrants to public higher education. His recent research produces the quantitative analysis to determine the effectiveness of the NSF-funded project "HOPE: a Holistic Two-Generation Approach to Improving STEM Education in the South Bronx."

LINDA HIRSCH

Linda Hirsch is a Professor in the English Department at Hostos Community College. She has a Ph.D. in English Education from New York University. At Hostos she has taught all levels of English from basic composition through the elective Introduction to Children's Literature as well as all levels of ESL. She has also taught courses in linguistics, reading and literacy-development in graduate programs at the CUNY Graduate Center; New York University; and Teachers College, Columbia University. She is widely published in books and journals and is a frequent presenter at national and regional conferences. Professor Hirsch is currently the Director of the A.A. Degree in Liberal Arts & Science at Hostos as well as Co-Coordinator of the Hostos Writing and Reading Across the Curriculum Initiative, a program she implemented in 2000. Her curriculum interests have included leading the creation of the First Year Seminar, Writing Intensive syllabi, and linking ESL and content courses.

Professor Hirsch is the author of two published chil-

dren's books, *The Sick Story*, and *You're Going Out There a Kid, But You're Coming Back a Star!* She also served as a consultant on the literacy-based TV show *Ghostwriter* at Children's Television Workshop. In addition, she is the creator, producer and host of *EdCast*, an award-winning program dedicated to issues in education airing on CUNY TV and the web.

In addition to her interests in writing and literature, she has a background in the sciences and once thought of becoming a biochemist!

NATHAN HOSANNAH

Dr. Nathan Hosannah is an Assistant Professor at LaGuardia Community College (CUNY) and has been performing regional atmospheric weather/climate research since 2013. After investigating aerosols and their effects on intricate and steadily changing summer storms over NYC, Dr. Hosannah's desire to explore weather in the Caribbean; simultaneously a place that is on the forefront of global climate change and the region of the world where his parents hail from (Guyana) led him to take on a postdoctoral position at the University of Puerto Rico at Mayaguez after receiving his Ph.D. from the CUNY Graduate Center. There, he investigated multi-scale impacts on weather and climate in the region. This work led him to extend his analyses to season-long periods, within which Saharan dust intrusion, marine aerosol and smoke created from biomass burning take effect on climate and weather over the region. He has presented his work- related to understanding multi-scale impacts on rainfall in coastal urban environments such as NYC, and tropical environments in the Caribbean at numerous national and international conferences. He envisions his position in academia as a business- for which the research professor is tasked to hire, manage, groups of associates in order to produce a product. In addition to his strong desire to continually eat from the plate of science, he was also one of two directors at Uppademics; a not-for-profit venture that seeks to support, educate, and empower NYC students who wish to balance their artistic passions with their academic goals.

CARMEN INDA GARCÍA

Dr. Carmen Inda is an Assistant Professor of the Natural Science Department at Hostos Community College.

She earned her master's degree in Neurosciences and Behavioral Sciences at Pablo de Olavide University (Sevilla, Spain) and her Ph.D. in Neuroanatomy at Complutense

University (Madrid, Spain). During her doctorate, she studied the distribution of specific types of interneurons, "the Chandelier Cells," in human and mouse brain.

In 2008, she was awarded the international fellowship Human Frontiers Science Program to develop her project on the molecular basis and circuitry of Memory Reconsolidation at Mount Sinai School of Medicine. Since then, she has developed collaborations with Memorial Sloan Kettering, NYU, and UCLM. Her work has been published in high-impact peer-reviewed journals and cited more than a thousand times.

She had designed pedagogic research projects to bring science closer to our students, such as "Building the Bridge between Community College and Research-intensive institutions" and "Women in Science: Navigating Career Challenges.". She is currently focused on translational research that involves amelioration of memory loss associated with Alzheimer's disease. She is a mentor to students in research and expects that her projects will promote students' engagement in careers in science .

BIAO JIANG

Biao Jiang is Associate Professor of Electrical Engineering at Natural Sciences Department, Hostos Community College - CUNY. He earned his Ph.D. from the City College of CUNY in 2013. His research interests lie in the broad areas of Telecommunication, Robotics, Computer Vision, and Deep Learning. He has published several papers in leading conference proceedings and journal in the area of robotics and computer vision in the past few years. He also dedicated himself in undergraduate student STEM research at Hostos. He has mentored 27 students in 13 projects, and presented in 23 student research and professional conferences representing Hostos. 4 mentored students won state-wide student research 1st places award competing with students from other universities and colleges including Ivy League schools. His students also received recognition by winning 3 research awards within CUNY. Dr. Jiang is so proud to have the opportunity to study, research, and work for CUNY in the past 12 years, and look forward to further contributing to build a strong STEM program in the south Bronx.

CYNTHIA JONES

Cynthia Jones earned a Master of Arts in Curriculum and Teaching from Teachers College, Columbia University;

she was one of ten educators accepted into the Teacher Corps Program, which was a competency-based program utilizing Marsha Weil's Models of Teaching. Jones received a Bachelor of Arts in Early Childhood-Elementary Education, and Reading from Adelphi University. Jones began her tenure at Hostos Community College as an adjunct in the English Department teaching ESL reading courses; she was appointed as a full-time Lecturer in 1981 teaching the full range of English course offerings. She particularly has enjoyed teaching developmental courses, Bronx Beautiful (a Capstone) and an English elective, Literature of the Black American. On November 20, 2014, Mr. Udall of Colorado announced the US Professors Award winners, and their names were recorded in the Congressional Record. Cynthia Jones was selected as the 2014 Carnegie Foundation for the Advancement of Teaching New York Professor of the Year. In June 2015, she was one of the 25 Bronx Influential Women honored by the Bronx Times Reporter. Cynthia is a Co-Director of both the Center for Teaching and Learning (CTL) and the Honors Program. Professor has been called an "Hostos lover" – she welcomes and embraces the term.

MARIAM KOANDA

I am Mariam Koanda, a mother, and an emigre from West Africa, Burkina-Faso. Coming from an under-developed country like mine, a part of the world where women's education rates are so low, only a few of those women succeed to make a career for themselves.

Mine has always been a career in the mining field because ever since as a child, I have been impressed by electronic devices valuable to society and the various components used to fabricate these devices. I was always wondered about the component of the masterpiece that was used to make the oil lamp that I was using on my school assignment.

My career journey, first started in 2012, when I became a heavy machines operator. I saw firsthand the place of women in engineering. I faced discrimination as the only woman amongst forty-four men during training. But that incident only encouraged me to seek further a degree in mining engineering. So, my goal was to take advantage of what this country offers in terms of education, which I know will open more doors for me. But starting over in a country where I knew no one or the language and supporting myself and my 16-year-old son as a single mother, were huge challenges. But I was devoted to building a better future, and to being a role model for every woman and mother. It is never late to start over, like I am doing in a bachelor's degree at

36.

Lastly, even though I have experienced numerous hardships over the years, I persevered to get exceptional grades and finished in Spring 2021 with a 3.69 GPA in my A.S in Mathematics from Hostos Community College and now, I am in my junior year pursuing my bachelor's degree in Mining Engineering at New Mexico Institute of Mining and Technology .

MOISE KOFFI

Dr. Moise Koffi is an Associate Professor and Deputy Chair of the Mathematics Department at Hostos Community College. His research focusses on oscillating induced flows and related heat transfer characteristics with applications to biological systems such as heat dissipation in large animals. He has published articles in the International Journal of Heat and Mass Transfer, and the Journal of Heat Transfer, which are ranked among the top engineering journals in his field. He has presented his work in national and international conferences on fluid dynamics and aerodynamics. As the recipient of multiple large grant awards from the New York State Education Department (NYSED), Dr. Koffi is the Director of the Hostos STEP and CSTEP Programs.

JUNGHANG LEE

Dr. Jung Hang Lee earned his Ph.D. in Mathematics Education from Teachers College, Columbia University. He has B.S. in Computer Programming and Applied Mathematics (Operations Research), M.S. in Applied Mathematics (Engineering Mathematics), and an M.A. in Mathematics Education. He is an Assistant Professor in the Mathematics Department at Hostos Community College since Fall 2018. Dr. Lee was an Associate Professor at Nyack College before he joined HCC. He was elected as the best analyst when he worked for National Security Agency (NSA), USA and Defense Security Association (DSA), South Korean Army. He was awarded as an emerging scholar in Nyack College. He presented his research on North Korean Secondary School Mathematics at the 12th and 13th International Congress on Mathematical Education as an invited lecture and regular lecture. He is a Co-PI for the National Science Foundation, HOPE program. His main research interests are student motivation, mathematical concept map, assessment, and North Korean mathematics education.

KARIN LUNDBERG

Karin Lundberg holds a Ph.D. in Germanic Languages and Literatures from New York University and an M.A. in Linguistics, German, English Studies and Second Language Pedagogy from Karl Ruprecht University, Heidelberg, Germany. Her research focus covers discourse analysis and discourse comprehension, gaming in ESL, intellectual history and relationships between language and knowledge acquisition. Her most recent article, A New Global Space: Rethinking General Education in a Diverse, Urban Learning Environment, explores general education and different knowledge perspectives in the ESL curriculum. She is a member of the Hostos COIL committee where she engages in establishing international virtual exchange projects in the college. She has previously served as co-chair of the CUNY ESL Discipline Council.

BLAISE MCNAIR

Blaise McNair has proudly served as a Peer Leader at Hostos Community College since Fall 2021. He earned a Bachelor of Arts in Sociology at The City College of New York and a Master of Public Administration at Baruch College. He also attended Hostos Community College in 2020 and 2021 as a visiting student. Currently, he is enrolled at Lehman College completing a Master of Arts in Health Education and Promotion. His long-term goal is to become a health professional that teaches preventative care to the patients he serves so that they can enjoy the highest quality of life possible. Blaise's favorite aspect of being a Peer Leader at Hostos is the creative methods he can utilize to help support students in their learning. This way, they can excel in their coursework, and hopefully learn to love Mathematics.

VICTORIA MUNOZ

Dr. Victoria M. Muñoz holds a PhD in English with a secondary specialization in Spanish from The Ohio State University. Her areas of expertise are Renaissance literature and culture with a focus on England and Spain. Her first academic book, Spanish Romance in the Battle for Global Supremacy: Tudor and Stuart Black Legends was published in 2021 by Anthem Press in its World Epic and Romance series. She teaches courses in literature and composition as an Assistant Professor of English at Hostos Community College, CUNY.

EBONY PEGUERO

Ebony Peguero was born and raised in Dominican Republic and came to this country about 10 years ago. She graduated from Hostos Community College in summer 2017 with an associated degree in Mathematics. In December 2019 she obtained her bachelor's degree in Mathematics and Middle and High School Education at Lehman College. She also recently graduated from Lehman College with a master's degree in Mathematics. Ebony Peguero is currently working as an assistant for the "Supplemental Instruction Program" at Hostos Community College. Her main role as an assistant in this program is supervising, mentoring, and supporting Peer Leaders. She also worked as a Peer Leader for the Mathematics department and Supplemental Instruction Program for about 5 years. During this position she was facilitating study sessions to holistically support and ensure students' academic success by finding and providing students with strategies and techniques that help them to become independent learners. Ebony's career objective is to become a mathematics teacher or a math faculty member in college. She is willing to help students and the community by transferring her knowledge and experience with Mathematics, and at the same time to help them see the beauty behind math.

ADRIAN POSADA

Adrian Posada is an Alumni of the Hostos Community College Dual Degree Program in Electrical Engineering. During his time at Hostos Community College, Adrian Participated in the NASA research programs with Dr. Nieves Angulo. Adrian was also a research student as part of the Louis Stokes Alliance for Minority Participation (LSAMP) where he participated in Mathematics research with Dr. Ross Fleck. At City College of New York, Adrian continued research under Dr. Zhigang Zhu and Dr. Edgardo Molina. At the CCNY vision lab he applied mathematical concepts of localization and wireless technologies for assisting the visually impaired. After graduating with his B.E in Electrical Engineering, Adrian began his career at an IBM Consulting company called CoEnterprise. There he worked as Systems Integration Engineer. At CoEnterprise Adrian designed and built automated solutions that would allow different software platforms to collect, transform and transmit data securely. Adrian recently joined Salesforce as Systems Integration Analyst. There he is working with REST API technologies to integrate hardware and software for Enterprise Architectures.

TANVIR PRINCE

Dr. Tanvir Prince has a Ph.D. in Mathematics and is currently working as an Associate Professor of Mathematics at Hostos Community College, City University of New York. His main interest is “Topological Quantum Field Theory” and “Recreational Mathematics”. He has recently become very interested in Mathematics Education. He has presented at numerous international and national conferences. He is regularly publishing articles focusing both on pure mathematics and mathematics education. Dr. Prince is also currently collaborating on projects that aim to expose community college students to mathematical research early in their academic careers. He is regularly serving as a mentor for student research in CRSP and CSTEP Program. His other interests include traveling and cooking and playing with his 8 years old son.

IVAN RETAMOSO

Dr. Ivan Retamoso holds a Ph.D. in Mathematics from The Graduate Center of New York and a Masters Degree in Mathematics from The City College of New York.

Before joining the Mathematics Department at BMCC, Dr. Retamoso taught Mathematics and Statistics at several CUNY Colleges, mainly at Baruch College, Brooklyn College, The City College of New York, and Kingsborough Community College. His main research interests are in Computational Mathematics, Polynomial Root finding Algorithms, and Teaching Mathematics using OER/ZTC with Technology.

Dr. Retamoso speaks English and Spanish fluently and enjoys meditation in his spare time.

Expertise: Computational Mathematics, Algebraic and Numerical Computation Algorithms, Polynomial Roots Approximation via Dominant Eigenspaces, Isolation of Real Roots, Structured Matrices, Cayley Maps, Rational Matrix Functions, Random Matrices, Computer Algebra.

For more updated information about Prof. Ivan Retamoso you may click on his faculty page:

<https://www.bmcc.cuny.edu/faculty/ivan-retamoso/>.

YOEL RODRÍGUEZ

Dr. Yoel Rodríguez is a theoretical biophysicist and Professor of Physics and Chemistry in CUNY’s Hostos Commu-

nity College. He is also a visiting professor of the Pharmacological Sciences Department at the Icahn School of Medicine at Mount Sinai (ISMMS). In addition, he is the Coordinator of the Joint Dual Engineering Degree Program with The City College of New York’s Grove School of Engineering of CUNY. He received his B.S. degree in Physical Chemistry from Havana University, and his Ph.D. in Theoretical Biophysics at the Complutense University of Madrid, Spain. Afterwards, he completed his postdoctoral training at ISMMS, New York in Computational Biophysics. He has published several peer-reviewed research articles and presented at numerous conferences. Dr. Rodríguez’s research is directed toward applying Computational Theoretical Biophysics approaches to a better understanding of fundamental molecular mechanisms in biological processes with implications in cancer, neurodegenerative disorders and cardiovascular diseases. He has received multiple educational and research grants from different agencies, including the National Science Foundation (NSF S-STEM, PI) and the National Institute of Health. Dr. Rodríguez has been the recipient of the prestigious Fulbright Scholar award in the 2016-2017 Academic Year. He has also been awarded the CUNY Chancellor’s Research Fellowship twice, in the 2015-2016 and 2017-2018 academic years. Dr. Rodríguez is also captivated by STEM pedagogical research and mentoring of undergraduate students. His mentees have earned multiple awards at undergraduate STEM conferences, and several have continued to earn graduate degrees in the field of science and engineering.

AMRIT SINGH

My name is Amrit Singh I am the youngest of six brothers, the husband to one wife and the father to five children. I was the first generation in my family to attend and complete a college degree. I earned my Bachelor’s Degree and Master degree majoring in Mechanical Engineering from The City College of New York. I started my teaching career in 1995, along the path, I have served as a STEM educator at multiple K-12 schools and higher education institutions in Guyana, The British Virgin Islands and The United States of America. Currently I serve as a STEM Teacher at Brookdale High School along with being an adjunct Lecturer at Hostos. I enjoy teaching and learning through discovery. I strongly believe that students do not care how much you know, until they know how much you care.

ANDERS STACHELEK (AJ)

While pursuing a doctorate in mathematics education at Teachers College, Columbia University, AJ Stachelek began to research equity in mathematics education. This desire was nurtured during their time at Teachers College, Columbia University. Dr. Erica Walker introduced them to the idea of multicultural education and considering the experiences of students and the reality of (mis)representation. At Teachers College, AJ wrote a dissertation that led to the development of a tool to visualize the structure of mathematics classroom lessons, specifically tracking the participation made available to the students (active or passive). This work was extended through a research grant to support the implementation of culturally relevant context in classrooms at Hostos, providing students the opportunity to dive into the mathematics of financial institutions and their availability in certain neighborhoods. Regarding more recent research involving analysis of systemic issues in mathematics education itself, AJ has spent many years working as the Co-PI on another grant funded by The Teagle Foundation on the Project for Relevant and Improved Mathematics Education (PRIME) in which four associate-degree granting institutions collaborated to enact changes in the structure and pacing of developmental education, focusing on implementing corequisite courses for students placed

below college level mathematics. This work was only the tip of the proverbial iceberg in terms of the need for systemic changes, but it is a starting point that AJ is thrilled to be a part of and share with you today.

OUMOU TRAORE

My name is Oumou Dili Traore. I am a civil and environmental engineering major. Friday May 18th 2021 marked the completion of my associate in civil engineering at Hostos Community College. Since then, I have been one of the many proud Hostos alumni, pursuing a bachelor's degree in Civil and Environmental Engineering at Cornell University.

My future goals are to use my education to develop sustainable energy models to better the living quality in developing countries, while helping develop the promising field of green energy worldwide and work in the field of construction whether in re-thinking construction policies (according to environmental challenges of our time), in the making of blueprints and field work related to environmental safety (e.g., water pipes for water quality control) but also in working on large engineering construction projects that push human creativity to the limit.

Louis Stokes Alliances for Minority Participation Program

The National Science Foundation-funded **Louis Stokes Alliances for Minority Participation (LSAMP)** program is an alliance of 12 CUNY campuses. The goal of the program is to support highly motivated Science, Technology, Engineering, and Mathematics (STEM) students with research opportunities and to increase the number of underrepresented minority students pursuing and graduating with associate and baccalaureate degrees in STEM. The 2-year LSAMP program provides supports for 30 Apprentices and 10 Fellows students at Hostos Community College to conduct research.

Application: <https://www.surveymonkey.com/r/DPTJCGN>

Contact Information:

Prof. Francisco Fernández, Faculty Co-Coordinator
ffernandez@hostos.cuny.edu
Prof. Yoel Rodríguez, Faculty Co-Coordinator
yrodriguez@hostos.cuny.edu
Room A-507

Eligibilities:

Students must

- be U.S. Citizens, U.S. Permanent Residents, U.S. Nationals;
- be enrolled in one of the STEM majors;
- show interest in STEM by indicating STEM as their choice of major;
- submit a personal statement describing educational and careers plans (Fellows).

LSAMP Scholars Benefits

- Mentored by dedicated STEM faculty;
- Participation in the *Intro to STEM Research Seminar*
- Immersive undergraduate research experiences;
- Exposure to STEM-related working and professional facilities;
- Participation at professional STEM conferences; and
- Career orientation workshops and other professional development opportunities.

CUNY Research Scholars Program

The **CUNY Research Scholars Program (CRSP)** provides funded laboratory experiences for associate degree students over a one-year period. The goal of the program is to encourage undergraduate students enrolled in associate degree programs to participate in authentic research and to increase persistence in Science, Technology, Engineering and Mathematics (STEM) disciplines.

<https://www.cuny.edu/research/student-resources/for-students/cuny-research-scholars-program/>

Application: <https://www.surveymonkey.com/r/ZVCTQKN>

Contact Information:

Prof. Yoel Rodríguez, Faculty Coordinator
yrodriquez@hostos.cuny.edu
Room A-507

Eligibilities:

Students must

- Be U.S. Citizen, U.S. Permanent Resident, or International Student with Student Visa
- Be enrolled in one of the STEM majors or be engaged in research with social sciences faculty;
- Show interest in STEM by indicating STEM as their choice of major;

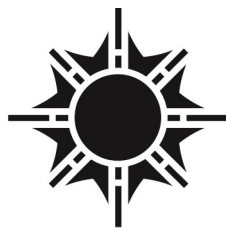
CRSP Scholars Benefits

- Mentored by dedicated STEM research faculty;
- Participation in the *Intro to STEM Research* Seminar
- Immersive undergraduate research experiences;
- Exposure to STEM-related working and professional facilities;
- Participation at professional STEM conferences; and
- Career orientation workshops and other professional development opportunities.

**The Mathematics Department Would Like to Express
Its Gratitude to All Who Made this Event Possible.**

We look forward to seeing you next year!

If you are interested in presenting during the next Mathematics Day
@ Hostos Community College, please contact Dr. Clara Nieto-Wire
at cnieto-wire@hostos.cuny.edu.



Hostos
Community College