Hostos Community College | CUNY

Natural Sciences Department

NEWSLETTER

SPRING 2025

Dr. Yoel Rodríguez
Professor and Chairperson

Dear Colleagues, Students, and Alumni,

Welcome, and Happy New Academic Year 2025–2026! On behalf of the Natural Sciences Department (NSD), I wish you a year filled with learning, discovery, and successful accomplishments.

In this **NSD Newsletter | Spring 2025**, I am excited to share highlights from the events and initiatives our department organized and participated in during the Spring semester. Among them was our **2025 Earth Week: Our Power, Our Planet!** event, which brought together over 125 attendees. The theme emphasized the urgency of expanding renewable energy sources—solar, wind, hydroelectric, geothermal, and tidal—and called for a three-fold increase in clean energy use by 2030. We also proudly celebrated our **STEM Graduates** collaboration with the Mathematics Department—a joyful and inspiring event that honored our students' hard work and perseverance. In addition, we welcomed **10 new scholars** into the newly NSF-funded **HEAT² Program** and hosted the **HEAT End-of-Semester Gatherin**g, a moving and motivating experience for all involved. This edition also features the important work of our **dedicated faculty and staff**, many of whom have contributed to the NSD for years. We shine a spotlight on **our students and alumni**, recognizing their achievements, including participation in field trips to **research laboratories** and **presentations at professional conferences**. I invite you to explore all of these stories in the newsletter and celebrate the milestones, collaborations, and growing impact of our department.

Looking ahead, the **NSD remains committed to excellence** in alignment with the College's mission. Our priorities are to continue **delivering high-quality education** in Science, Engineering, and Forensic Science, as well as in foundational courses for A.A.S., Allied Health, and Liberal Arts programs; embrace the new AI era to enrich teaching and learning; develop **new academic programs** aligned with the needs of New York City and the national workforce; expand **undergraduate research and internship opportunities**; equip our **laboratories with state-of-the-art facilities** to better prepare our students; and encourage and support **faculty and staff in pursuing internal and external funding opportunities**.

I extend heartfelt thanks to Madame President Daisy Cocco De Filippis, our former Provost Shiang-Kwei Wang, and Interim Provost Andrea Fabrizio for their tireless support of our department and students. The NSD looks forward to working collaboratively with all of you to strengthen our academic and research programs. Here is to a productive, inspiring, and fulfilling academic year ahead. Good luck—and most importantly, enjoy what you do! **Thank you very much!**

Spring 2025 – Earth Week Celebration

The Natural Sciences Department | 2025 Earth Week Celebration: A Great Success!

The **2025 Earth Week Celebration - Our Power, Our Planet!**, held from April 21–25, was a tremendous success, bringing together **over 125 students, faculty, staff, and administrators** for a week of learning, engagement, and action. A highlight of the week was Wednesday, April 23, featuring the inspiring Keynote Presentation by Weronika Ciechowska-Polanco, MSFE, followed by a thought-provoking Panel on Environmental Challenges and Educational Awareness. The panel included insightful talks from Professor Julie Trachman, PhD, Katherin Sibel from the Department of Health and Mental Hygiene, and Hostos students Melanie Luciano and Charlie Valencia. Throughout the week, the campus was energized with a variety of events, including class Teach-in activities, STEM Conversations, hands-on STEM Activities, the Earth Day Trivia Challenge, and the exciting Hostos STEM Olympiad. A heartfelt thank you to all who participated, supported, and helped make this week a celebration of community, science, and our shared commitment to the environment.





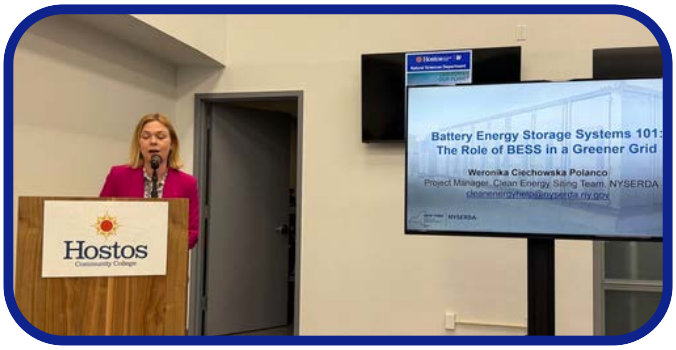

Presenters and Attendees at the Natural Sciences Department | Spring 2025 Earth Week Celebration

NSD | Guest Spotlight

Battery Energy Storage 101: The Role of Battery Energy Storage in a Greener Grid

Weronika Ciechowska-Polanco, M.S.F.E, delivered an informative presentation during the **2025 Earth Week Celebration**, highlighting the role of **battery energy storage systems (BESS)** in advancing the clean energy transition. Her talk focused on how **BESS capture and store energy generated from renewable sources** like solar and wind, allowing for greater energy reliability and reduced dependence on fossil fuels. Ms. Ciechowska-Polanco explained that **BESS serve as a critical bridge between renewable energy production and practical everyday use, supporting efforts to decarbonize the power grid and address climate change.** She emphasized how these systems make renewable energy more dependable by storing energy for use during peak hours or when weather conditions are less favorable. In addition to the technical overview, **she placed BESS within the larger conversation about climate change**, urging communities to become more informed about sustainable technologies and their impact. Her presentation made complex concepts accessible to students and faculty, fostering awareness about the urgent need for environmental solutions and energy resilience. Ms. Ciechowska-Polanco's message highlighted the **intersection of innovation and environmental responsibility**, reminding attendees that **informed action is essential in creating a more sustainable and equitable future**.

Weronika Clechowska Polanco
M.S.F.E.
Project Manager NYSERDA



A New Chapter – Celebrating a Journey of Dedication and Heart

Professor Olga Steinberg Neifach's Retirement

Dr. Olga Steinberg Neifach was born in Moscow, Russia, and graduated from Moscow State Pedagogical University with a dual degree in Biology and Chemistry, and from the CUNY Graduate Center/Brooklyn College with a Ph.D. in Cell, Molecular and Developmental Biology followed by the postdoctoral fellowship at the Weill Cornell Medical College. **Her research centered around the mechanisms of maintenance and regulation of telomeres, and DNA fragments at the end of eukaryotic chromosomes** and was supported by several PSC-CUNY and NSF awards.

Prof. Olga Steinberg Neifach, PhD

At Hostos Community College, she taught Biology for non-science major students, Anatomy and Physiology and Microbiology courses. Though all those courses are housed in the Natural Sciences Department, **they have different educational goals**. The goal of the Biology course is to introduce students to riches of learning about the most basic processes that sustain life in its many incarnations, while the goal of the Anatomy and Physiology and Microbiology courses is to make sure students acquire knowledge required for success in their chosen professions.

Hostos Community College provides students of diverse backgrounds and educational levels with an opportunity to get ahead and improve life for themself and their families. Students come to Hostos to start their education, or acquire solid base for their further education, or to get a profession. It is an honor and a privilege to help students in their journey to a better future.

Her advice to new faculty is to **know and respect your own limits,** and to be able to say "no" to a new shining undertaking you desperately would like to be involved on top of everything you do already.

Her favorite inspirational quote is attributed to Sir Winston Churchill: **"Success is an ability to go from failure to failure with unflagging enthusiasm"**.

THANK YOU Professor Steinberg for your remarkable journey marked by unwavering dedication, deep commitment, and heartfelt service!

Faculty Spotlight | Full Time

Professor Anna Ivanova comes from Georgia, a small and beautiful country in Europe, where she completed all her academic studies (B.S., M.S. and Ph.D.) at the Department of Physics, Ivane Javakhishvili Tbilisi State University. She is a **Biophysicist** and her research background is rather diverse. A significant part of her research focused on **physical mechanisms of DNA ejection process from phage, which she studied through her Ph.D thesis**. She continued phage-related studies during her postdoctoral research in France, at the Institut de Biochimie et Biophysique Moleculaire et Cellulaire, Universite Paris Sud, Orsay. Her research focus shifted to **HIV research** once she joined Columbia University, Department of Pathology, Molecular Virology Division to continue her postdoctoral research journey, where she was able to significantly expand her research background to biochemistry, molecular and cell biology, and other relevant fields of science. Currently, in addition to phages, HIV and mechanisms of cell signaling, her research interest is related to **phytoremediation**, specifically applying phyto-remediation to **solve heavy metal-caused water pollution issue and phytotherapy approach to treat ADHD**.

Prof. Anna Ivanova, PhD
2025 Teaching Excellence Award

From the moment she stepped in the Natural Sciences Department office at Hostos for her interview for the Adjunct Assistant Professor position in 2015, she somehow **immediately felt at home**. The meeting with the search committee during the interview confirmed her desire to work here, at this department, desire to work with these wonderful people and high-level professionals. And this is how Hostos has become part of her life. She is very happy to be a member of the Natural Sciences Department and to be working alongside such a **dedicated, collegial, and professional faculty**. She became a full-time Assistant Professor in 2019 and currently continue her journey at Hostos serving as the **Science AS Program Coordinator** and teaching Chemistry and Physics courses.

As a scientist and educator, and in her role as Science AS Program Coordinator she is **very enthusiastic not only about teaching science, but also about helping our students better connect their academic and career goals, support them in identifying themselves in STEM careers**. She hopes that all the pedagogical approaches she applies in her classes, all the extracurricular activities and events, such as various STEM careers-oriented workshops, presentations, field trips, STEM clubs' activities she organizes and conducts, as well as mentor students in undergraduate research makes a positive impact on our students.

Apart from sharing her passion and love for science, she often shares with her students also **her love for music and art**. Thus, before she starts her class, she usually show highlights from my favorite **operas to introduce her students to this beautiful form of art**.

She loves what she does very much and she hopes the students recognize her dedication and it inspires them in their journey. She feels very connected to the quote by S. Christa McAuliffe: **"I touch the future. I teach."** and I try to live by the one that was gifted to us by Maya Angelou: **"Try to be a rainbow in someone's cloud."**

Faculty Spotlight | Full Time

Prof. Anna Manukyan, PhD
2025–2026 Leadership and Innovation Faculty Fellow

Dr. Anna Manukyan is an Associate Professor in the Physical Sciences Unit and **Coordinator of the Forensic Science** Dual Degree Program with John Jay College of Criminal Justice. At Hostos, she oversees curriculum development, fosters faculty collaboration, and supports career integration for students in science and criminal justice pathways. Her career spans **computational chemistry, medical research, data science, and STEM education.** She brings an **interdisciplinary and student-centered approach** to both teaching and leadership. She earned her Ph.D. in Biomedical Sciences from Old Dominion University, specializing in computational chemistry and biophysics, and later matriculated into the MD program at Georgetown University School of Medicine. During her time in the program, she successfully completed the full preclinical curriculum and began clinical training, working directly with pediatric ICU and transplant patients. She also conducted research at the National Institutes of Health (NIH), where she focused on the **behavior of synthetic nucleic acids with therapeutic potential**. Dr. Manukyan completed postdoctoral fellowships at The University of Chicago and The City College of New York, where she investigated peptide-membrane interactions and contributed to membrane modeling software development. She also completed a Data Science Fellowship at the Pragmatic Institute, applying **machine learning and predictive analytics** to large-scale social, consumer, and environmental datasets. Her research has been published in leading scientific journals and presented at national conferences.

She currently leads research on human defensin-membrane interactions and the development of synthetic compounds with unique DNA/RNA binding patterns. Dr. Manukyan has received several CUNY PSC Research Awards and is the recipient of the 2024-2025 CUNY Research in the Classroom grant, which supports the integration of undergraduate research experiences into chemistry instruction. **As a 2025-2026 Faculty Innovation Fellow with the CUNY Office of Careers and Industry Partnerships, Dr. Manukyan is advancing career-connected learning by embedding structured, employer-informed career pathways into STEM programs**. Her leadership in the Career-Infused Degree Maps initiative and participation in the LifeSci Internship Consortium strengthen the link between academic coursework and workforce readiness across the CUNY system. Her teaching philosophy emphasizes inquiry, scientific literacy, and relevance to real-world challenges. She believes in empowering students, especially those from historically underrepresented communities, to see themselves as future scientists, innovators, and change makers. Dr. Manukyan is a member of the American Chemical Society and the Biophysical Society and is active in faculty development and mentoring initiatives throughout CUNY.

Why Hostos? **Dr. Manukyan values Hostos for its vibrant, mission-driven community and its commitment to access and equity**. She finds purpose in guiding resilient and determined students toward fulfilling academic and professional futures. Fun Fact: **She is a certified yoga instructor and a classically trained violinist**. Inspirational Quote: **"The future belongs to those who believe in the beauty of their dreams."** - Eleanor Roosevelt

Faculty Spotlight | Full Time

Prof. Vyacheslav Dushenkov, PhD

Professor Vyacheslav Dushenkov's journey from teaching biology in the Soviet Union to becoming a key figure at Hostos Community College **reflects his deep commitment to education and scientific exploration**. With a career spanning multiple decades and countries, he has shaped the academic landscape and dedicated himself to making science accessible and impactful to communities around the world.

Dr. Dushenkov's journey began at Moscow State Pedagogical University, where he earned his **M.S. in Biology, Chemistry, and Science Education in 1977**. His first teaching role was as a middle school biology teacher in the Soviet Union. Despite challenging conditions and harsh Russian winters, he developed a passion for **nature exploration and teaching that guided his career**. His early experiences as an educator inspired his lifelong dedication to teaching and intellectual curiosity.

After earning his Ph.D. in Biology in 1984, Dr. Dushenkov expanded his academic focus to include **general biology, invertebrate zoology, ecology, theory of evolution, and responsible conduct of research**. Teaching at the university level, he had the opportunity to share his knowledge and foster critical thinking in his students. His teaching philosophy remains grounded in the importance of nurturing intellectual curiosity, a value he continues to instill in his students today.

In 2011, Dr. Dushenkov was invited to join Hostos Community College by Professor Olga Steinberg. The diverse and driven student body at Hostos presented a new challenge, and Dr. Dushenkov applied the same rigorous academic standards he had upheld throughout his career. When a student once asked, "**Why do you demand so much from us? We're not at Harvard," Dushenkov responded simply: "To succeed, you need to be better than Harvard students."** This conversation epitomized his commitment to ensuring Hostos students exceeded expectations, equipping them with the tools to succeed, regardless of their background.

Dr. Dushenkov's research has made a significant impact on the global scientific community. With **over 100 peer-reviewed articles** and **ten patents** to his name, his research focuses on **phytoremediation, botanical therapeutics, and STEM education**. As the managing director of the Global Institute for BioExploration (GIBEX), he has designed and implemented research and training programs across four continents and 19 countries. His work with the Center for Botanicals and Chronic Diseases (CBCD) has brought valuable resources to students in Tajikistan, Ecuador, and Indonesia, extending his influence far beyond the U.S.

Outside of his academic and research work, Dr. Dushenkov is an avid **nature photographer**, particularly **passionate about capturing wildlife**. This love for nature complements his scientific endeavors and offers him a unique perspective on the world.

Professor Dushenkov's career is a testament to the power of education, dedication, and a lifelong commitment to scientific discovery. At Hostos, he continues to **inspire students to think critically, pursue excellence**, and reach beyond the ordinary, preparing them for future challenges and opportunities. His impact on both his students and the global scientific community will continue to resonate for years to come.
"Scientia potentia est" – Knowledge is power.

Faculty Spotlight | Adjuncts

Prof. Vivien Díaz-Barrios

My parents came from Puerto Rico and I was raised in the South Bronx near Hostos. I have been at **Eugenio Maria de Hostos Community College since 1978**, working as an adjunct lecturer and teaching a variety of Biology courses throughout the years. When presented with the opportunity to teach at Hostos I felt that it was the way to give back to my community. **I love my work and enjoy working with students.** We are also the proud parents of two adult children but also have many fur babies, 13 cats at last count, and we feed a number of cats outside our home. The **cats enrich our lives** and we spend many pleasurable hours watching them and their antics. I am also a Board-Certified Genetic Counselor with licenses in 12 states. I worked for **over 30 years as a full-time Genetic Counselor while continuing to teach at Hostos**. Some of the areas in Genetic Counseling in which I have been involved is through the evaluation of a client's carrier status due to inheritance of a pathogenic gene variant; or collaborated with parents of a newborn with a genetic condition who inherited a pathogenic variant identified through whole genome sequencing as well as helping individuals at risk to inherit genetic conditions.

My philosophy for teaching and genetic counseling is similar to Eugenio Maria de Hostos' philosophy **"...to teach the people to think."** In genetic counseling, as in teaching, we provide both clients and students with information that helps them to move forward and to make decisions in life. I believe that with my dual career I have served as a **role model for my students**. I remain available for the new students and remain an anchor for those who completed their degree.

Prof. Sharmila Shakya

I have been teaching General and Organic Chemistry lectures, laboratory, and recitation at Hostos since 2006. Growing up in Nepal, I completed a **Master of Science degree in Chemistry** from Tribhuvan University, Nepal, then, in the United States, earned a Master's degree in Chemistry from CUNY Graduate Center and a Master's degree in Middle and High School Science Education from Lehman College. Previously, I had taught chemistry at various colleges in Nepal. Here in New York, I began teaching as an adjunct lecturer at Brooklyn College in 2003, where I taught Organic and General Chemistry recitation and laboratory. I chose Hostos to save time on my commute, as I used to live nearby. That way, I could spend more time with my children. **My teaching philosophy is to treat all students equally and create a learning environment where students can openly express their ideas. I endeavor to relate concepts to everyday life to boost their interest in learning**.

Even **teachers learn while teaching**. It is a profession where you continue developing skills. I have developed both the emotional maturity and work ethic to handle the rigor of the course and maintain dedication to the field of teaching. You truly will gain by giving out more. Students who believe I made a great impact in their lives are still in touch with me. Life is not easy or fair, yet it is very precious. According to Buddhism, it is difficult to be born with enough good karma to be a human, so don't waste life, **try to find the positives between the negatives**. Your surroundings will test you, but **be strong, keep doing good work, and never give up**. A s**tudent's life is full of challenges and the need to balance education, work, and other commitments**. You can achieve your goals only if you can overcome these challenges. In order to relieve stress, indulge in some of your interests. I **enjoy cooking** as a diversion from long teaching duties.

"A good teacher can inspire hope, ignite the imagination, and instill a love of learning." - Brad Henry

Staff Spotlight | College Lab Technician

I am originally from Poland, where I earned my **B.S. in Medical Technology** from the Medical College in Rzeszow. My cultural roots have shaped my **strong work ethic**, attention to detail, and **passion** for science and education. After moving to New York, I joined Hostos Community College in 2009 and have been part of the Natural Sciences Department ever since, serving as a **full-time College Laboratory Technician**.
What drew me to Hostos is its mission of providing educational opportunities to a **diverse and vibrant student body**. I love being part of a community that **supports student success** at every level and where my work can have a direct impact on their learning experience.

At Hostos, I **manage microbiology and biology labs**—preparing materials, maintaining equipment, and supporting faculty and students with hands-on instruction. I also help coordinate events like **Earth Day and Science Day**, which are great opportunities to bring science to life in fun and creative ways.
Fun fact: Outside of the lab, I **enjoy gardening and cooking**.

"Knowledge is the greatest treasure one can possess."

Ms. Ewa Dziobak-Gonczowski

A Leader Who Continues to Inspire

Professor Francisco Fernández, Former NSD Chairman

We would like to take this opportunity to recognize and extend our deepest gratitude to **Professor Francisco Fernández** for his remarkable leadership and service as Chair of the Natural Sciences Department, a role he held with distinction for 12 years—from July 1, 2009, to June 30, 2024. While he has now stepped down from his administrative responsibilities, we are proud and grateful that he continues to enrich our community as a valued faculty member.

Professor Fernández has been a pillar of the department—**an inspiring leader, a thoughtful mentor, and a passionate educator**. His unwavering dedication, integrity, and vision have left an indelible mark on faculty, staff, and students alike. His influence continues to resonate throughout every corner of our community.

THANK YOU, Professor Fernández, for the enduring legacy you have built and the knowledge, care, and spirit you continue to share. You will always hold a special place in the heart of the Natural Sciences Department.

Prof. Francisco Fernández, PhD

Featured Alumni

Dr. Dane Christie

Dane Christie enrolled in the **joint dual degree program between Hostos Community College and The City College of New York (CCNY)** as a chemical engineering major in the fall of 2008. Formative years were spent in The City. Dane immigrated from the Dominican Republic a few months before starting school. When it came to assimilation, the struggle was real. Fortunately, the **support network available at Hostos–peer and faculty mentors**, the Hostos Student Leadership Academy, the Honors Program, student clubs, the library, and needs-based scholarships provided an **environment that nurtured his desire to learn**.

After 2.5 years at Hostos, Dane attained an **Associate of Science degree in chemical engineering then transferred to CCNY to complete the second half of the dual degree program**. While at CCNY Dane completed **undergraduate research** in the chemical engineering and chemistry departments, and as a summer intern at the University of Chicago. This exposure to research combined with critical encouragement from **faculty mentors** Yoel Rodríguez and Ilona Kretzschmar of Hostos and CCNY, respectively, **paved the path for a future in graduate school**.

On **December 3, 2018 Dane successfully defended his Ph.D. thesis** thereby earning a Doctor of Philosophy degree in **chemical engineering from Princeton University**. Today Dane works as a materials scientist for Corning Incorporated at their research and development facility located in Painted Post, New York.

Fun fact: **Dane played professional baseball as a non-draft free agent for the Toronto Blue Jays major league baseball team in the Dominican Republic.**

"We are all being tested in life. It is one test you can't cheat on. Stay hard." - David Goggins

Student Spotlight

Franyeli Contreras

My journey in higher education began at Hostos Community College, where I had my first real taste of college life. I earned my **associate's degree in Forensic Science** there, which laid a **solid foundation for my academic and professional growth**. From HCC, I transferred to The City College of New York to pursue a **bachelor's degree in Biotechnology**. Through my research experience, I gained valuable skills in coding, scientific literacy, and public speaking. **Learning to code was particularly transformative**. It was something I never imagined myself doing, I'm excited to continue refining this skill in the future.

For as long as I can remember, I've dreamed of becoming a medical doctor. **Being exposed to research, however, opened my eyes to the world of scientific discovery**. It has shown me what a future in research could look like. This experience has led me to consider **pursuing an MD/PhD degree**. When I started my journey, I was completely new; I was afraid to make mistakes and afraid of being seen as a beginner. But I eventually realized that everyone starts somewhere. Even the most accomplished professionals were once rookies too. That **mindset helped me grow and push through my doubts**.

Looking ahead, I see myself working in a hospital as a surgeon, perhaps even leading the department, who knows. If I follow the MD/PhD path, I also picture myself teaching and mentoring future generations of doctors. My greatest inspiration is Jesus. I believe the best way I can serve Him is by helping and serving others. **My family also inspires me daily**; I want to honor all the sacrifices they've made to bring me to this moment.

"Don't let the fear of being seen as a rookie stop you from trying; even the greatest of the greats were once beginners. You don't have to be naturally gifted to be extraordinary, discipline beats talent every time. There are people who support you, believe in you, and are waiting for the impact you will make."

Susan Hu

Susan Hu recently graduated with an **associate's degree in Liberal Arts in Science** from Hostos Community College. They plan to **pursue a Bachelors in Biology** with a special interest in **arthropods**. Previously, Susan was invited to join the second cohort to the C**UNY NSF funded India Air Pollution Study in 2023**. Currently, they are conducting research with Dr. Vladimir Ovtcharenko at the American Museum of Natural History to create an online catalogue of ground spiders. The first part of the project involved organizing data from preserved specimen labels. Now, they take photographs – using a stereo microscope – of those specimens; their eyes, spinnerets, genitalia, and more at the museum's microscopy and imaging facility. At the museum, **Susan learned techniques connected to identifying and studying the morphology of ground spiders** and this experience has affirmed their interest in conservation and arthropod research.

As someone with anxiety, Susan had difficulties with presentations and public speaking as a whole. Supported by professors and peers alike, they were encouraged to present their research to fellow students and to attend symposiums, displaying their poster of the cataloguing and photography work. **Each of these experiences built their skills and confidence.** With guidance from their older sister, the faculty and staff at Hostos, they are **one step closer to success on the path to higher education**.

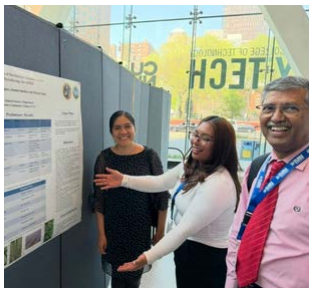
"I've changed my major three times and still am unsure of my future but I've had to have patience with myself. The only thing I can do is to persevere and to keep going."

Student Conference Participation

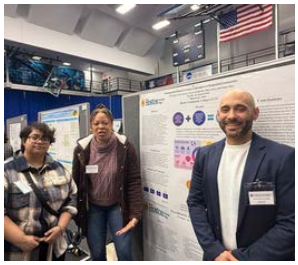
- 2025 Hostos Student Symposium, April 28, Hostos Community College, NY
- 2025 CUNY BMI 1st Annual Research Symposium, May 2, City Tech of CUNY, NY
- 2025 CUNY Undergraduate Research (UR) Celebration, May 23, John Jay, New York, NY
- 2025 CRSP Annual Symposium, July 8-9, LaGuardia, New York, NY

Hostos Student Symposium

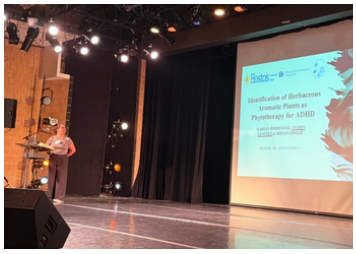

CUNY BMI Research Symposium




CUNY UR Celebration

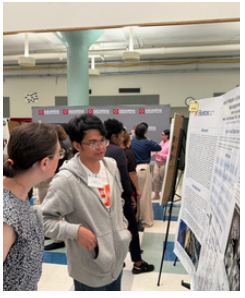


CRSP Annual Symposium









Events

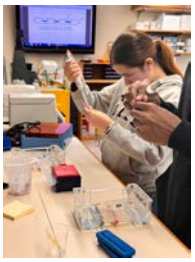
- HEAT^2 Welcome Gathering | HEAT^2 Scholars | Cohort 1, March 26, 2025, HCC, New York, NY
- DNA Learning Lab, Cold Spring Harbor, April 4, 2025, New York, NY
- Spyscape Museum, May 9, 2025, New York, NY
- STEM Graduates Celebration, May 15, HCC, New York, NY
- HEAT End-of-Semester Gathering, May 16, 2025, HCC, New York, NY
- Honors Convocation, May 21, HCC, New York, NY
- Hostos Commencement, May 27-28, 2025, HCC, New York, NY
- Mercer Labs, June 3, 2025, New York, NY

HEAT Welcome Gathering




DNI Learning Lab





Spyscape Museum



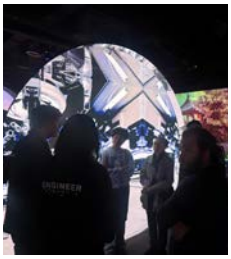

STEM Graduates Celebration




HEAT End-of-Semester Gathering | Graduates


Mercer Labs




Hostos Honors Convocation






Hostos Comencement



Natural Sciences Awards | AY 2024 – 2025

Natural Sciences Award

1st Place: Esmy Lorraine Durán
2nd Place: Marilin Rodríguez

Mildred Hernton Award

Elizabeth Abankwah

The Woman in Science Award

Altagracia De La Rosa

Honorable Mention

Marilin Rodríguez
Susan Hu

Environmental Stewardship Award

Altagracia De La Rosa

Forensic Science Award

Franyeli Contreras Mateo

Engineering Award

1st Place: Altagracia De La Rosa
2nd Place: Joel Javier
3rd Place: Jannis Tyson

Honorable Mention

Mohamed Bachir Cisse
Patrick Díaz
Anthony González

BMI TEAM Award

1st Place: Altagracia De La Rosa
2nd Place: Mohamed Bachir Cisse
3rd Place: Joel Javier

Hostos Valedictorian Class 2025

Esmy Lorraine Durán
Liberal Arts and Science AS

NSD | Highlight in Scholarship

Peer-Reviewed Articles

- Satorov S, Mavlonazarova S, Yusufi S D, **Dushenkov V**. Total Polyphenol Content, Antioxidant Potential, Antibacterial and Antifungal Properties of Ferula L. Species Growing in Tajikistan. Journal of Drug and Alcohol Research 2024, 13, 9, doi:10.4303/JDAR/236424. Direct link: https://academicworks.cuny.edu/ho_pubs/114/.
- Armas, I. Sinaga, E. Saribanon, N. Noverita, Effendi, A. Rohadi, C. Adilah, H., **Dushenkov, V**. Raskin, I. Pioneering plant metabolomic library of Indonesian plants for research, conservation, capacity building and economic development. APN Science Bulletin 2024, 14, 120-137, doi:10.30852/sb.2024.2569. Direct link: https://academicworks.cuny.edu/ho_pubs/113/.
- Calaf GM, **Roy D**, Jara L, Romero C, Crispin LA. Genes Associated with the Immune System Affected by Ionizing Radiation and Estrogen in an Experimental Breast Cancer Model. Biology 2024, 13, 1078. https://doi.org/10.3390/biology13121078.
- Calaf GM, **Roy D**. Role of PARP Inhibitors: A New Hope for Breast Cancer Therapy. Kamalendu De, Malabendu Jana, Bhabadeb Chowdhury, Int. J. Mol. Sci. 2025, 26, 2773.

Grants

- **Amarante, D.** Complexes of Tridentate Aminothiol and Phosphinothiol Ligands with Platinum-Series Metals. 2025 ADELANTE Project ($10,000).
- **Manukyan, A.** Advancing HTLV-I Therapeutics: Integrating Molecular Dynamics and Structure-Based Inhibitor Design | 2025 ADELANTE Project ($10,000).
- **Manukyan, A.** Building Career-Ready Skills in Undergraduate Chemistry: A Research-Integrated Approach. 2025 CUNY Research in the Classroom Grant Program ($10,000).
- **Nuñez Rodríguez, N.** The Development of a General Education Environmental Sciences Course | 2025 CUNY Online Initiative (CUNY, $6,000).
- **Nuñez Rodríguez, N.** Next-Gen Learning: Integrate AI,Civic Engagement, or Sustainability into Pathways | 2025 CUNY Innovative Pedagogy Initiative (CUNY, $500).

20 Years and Beyond: A Legacy of Excellence

With over two decades of dedicated service to **Hostos Community College-Natural Sciences Department**, these distinguished employees have exemplified **unwavering commitment, professionalism, and excellence**. Their invaluable contributions have been instrumental in **advancing the College's mission and uplifting generations of students**. We honor their legacy—**a legacy built on hard work, integrity, and a deep sense of purpose**—and we extend our heartfelt thanks for their many years of exceptional service.

20+ Years of Service

Flor Henderson
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Dora Villa González
Samuel Asante
Katherine Neuhoff
Joseph Obunike
Faina Riftina
George Rosa
Anil Saha

30+ Years

Amanda Bernal-Carlo
Francisco Fernández
John Gillen

40+ Years

Vivien Díaz-Barrios
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Thank you for being an enduring part of the Hostos story!

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- To make a gift to benefit the **Natural Sciences Department** specifically, please contact Idelsa Méndez at
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NSD Faculty at Commencement with Hostos Valedictorian Class 2025
Esmy Lorraine Durán, Liberal Arts and Science AS

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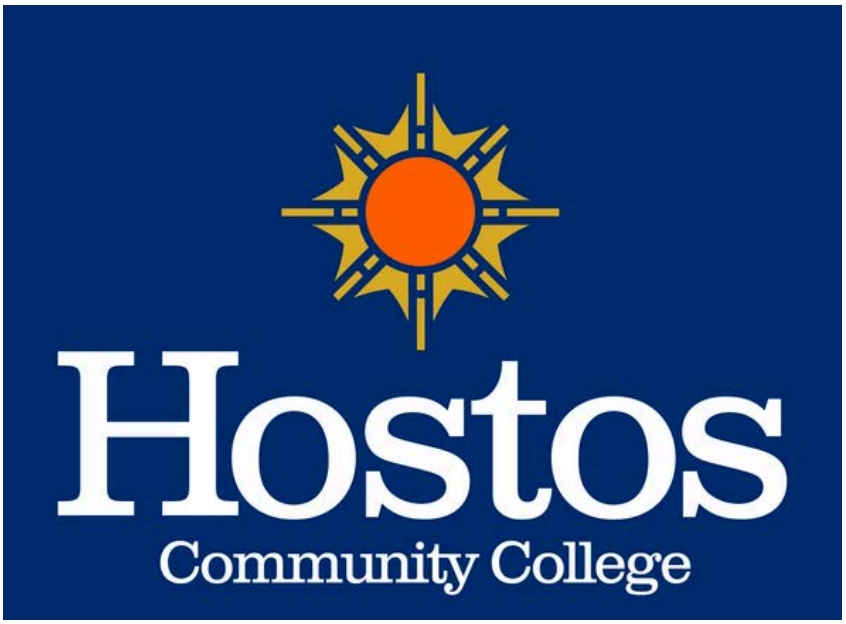

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