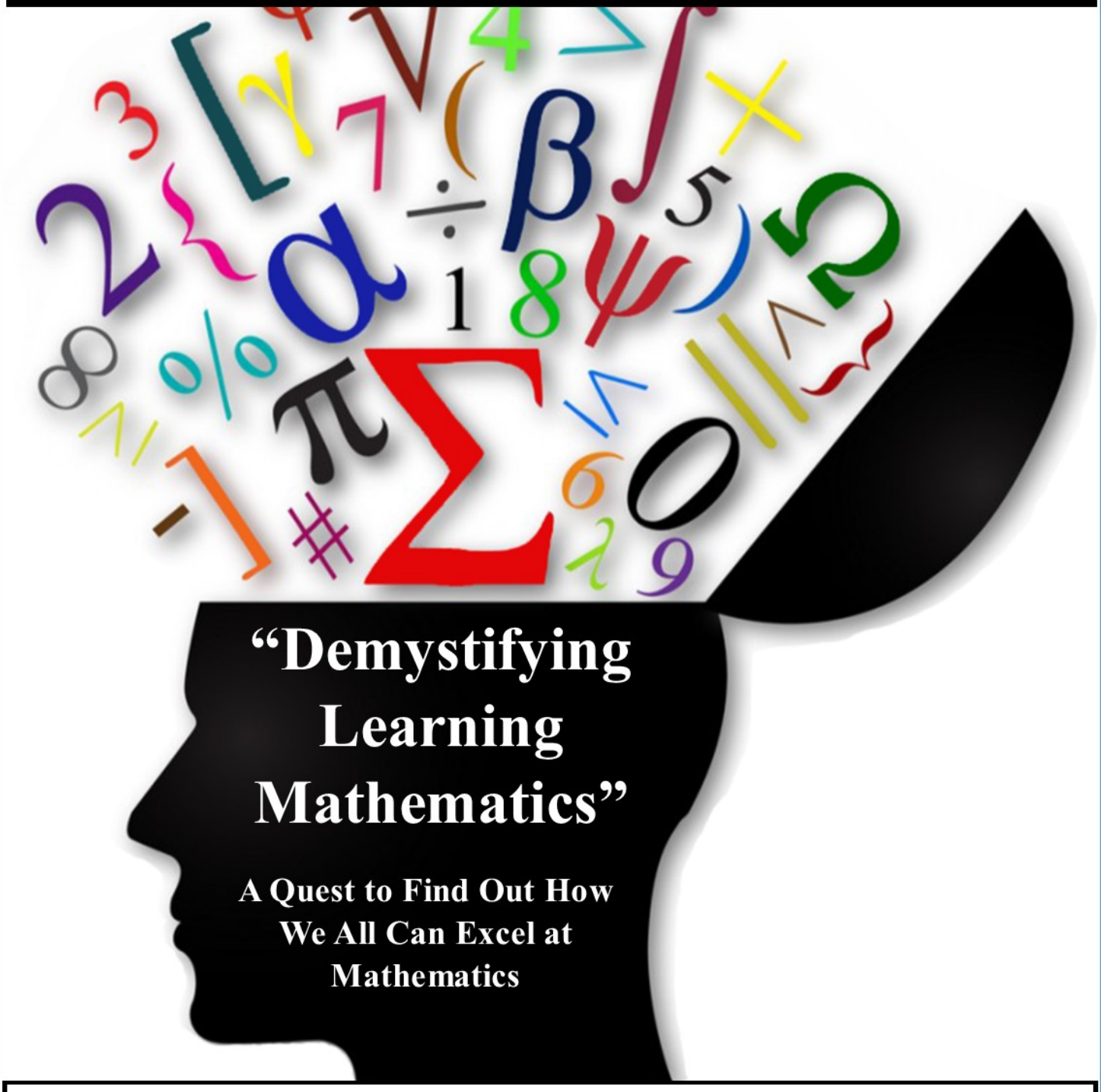
2018 OFFICIAL TECHNICAL PROGRAM

3rd Annual Mathematics Day @ Hostos



"Demystifying Learning Mathematics"

A Quest to Find Out How We All Can Excel at Mathematics

Hostos Community College 50 1968 2018

HOSTOS COMMUNITY COLLEGE | BRONX, NEW YORK

MARCH 14, 2018 | CAFETERIA — C BUILDING

CUNY The City University of New York

3rd Annual Mathematics Day @ Hostos

Hostos Café C Building Wednesday, March 14, 2018

Demystifying Learning Mathematics

A Quest to Find Out How
We All Can Excel at Mathematics

Contents

Hostos Community College 50 1968 2018

ORGANIZING COMMITTEE/ COLLABORATORS

ORGANIZING COMMITTEE

Clara Nieto-Wire	Event coordinator, Chair of Mathematics Day Organizing Committee
Nieves Angulo	Chair of Mathematics Department
Cynthia Jones	Chair of the General Education Committee
Luz Rivera	Session for Faculty, Staff and Administrators Only coordination
Moise Koffi	Sponsors co-coordinator
Diandra Jugmohan	Sponsors co-coordinator
Gisselle Guzmán	Event registration and in-site Peer Leaders coordination
Armando Amador	Table exhibits support
Ramón Gómez	Table exhibits support
Lauren Wolf	Table exhibits support
Tanvir Prince	Intermissions support - Mathematics Day @ Hostos / Slide Show
Anders (AJ) Stachelek	In-site tech support
Dionicio Taveras	Mathematics adjunct faculty integration
Lissette Maspons	General support
Fidelia Okolo	General support

COLLABORATORS

Office of the President
Office of Academic Affairs
General Education Committee
Center for Teaching and Learning
Natural Sciences Department
Allied Health Department
Student Government Association - SGA
Student Development and Enrollment Management - SDEM
Office of Student Activities - OSA
Hostos Academic Learning Center - HALC
Title V
Supplemental Instruction Program - SI
Peer Leaders
Duplicating
Hostos Collegiate Science and Technology Entry Program – CSTEP
Louis Stokes Alliance for Minority Participation – NYC LSAMP

SPONSORS

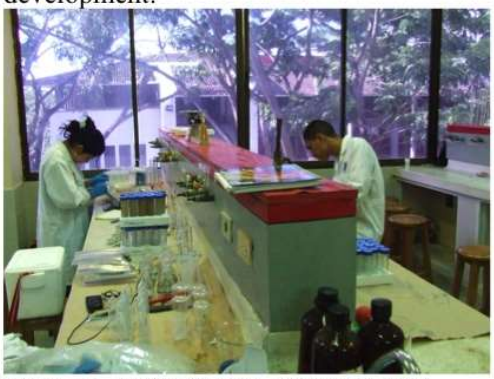
- Office of the President
- Office of Academic Affairs
- Office of Student Activities
- Hostos Collegiate Science and Technology Entry Program – CSTEP
- Black Male Initiative - BMI
- Student Government Association - SGA
- Title V
- Accelerated Study in Associate Programs – ASAP
- CUNY Research Scholars Program - CRSP
- Mathematics Club
- Engineering Club
- STEM Club
- Mathematics Department Faculty and Staff

PROGRAM - EDITORIAL BOARD

Clara Nieto-Wire	Event coordinator, Chair of Mathematics Day Organizing Committee
Flavio Cabrera	Program Editor - Penn State University - Berks

THE NEW YORK CITY LOUIS STOKES ALLIANCE-NYC LSAMP

The mission of the New York City Louis Stokes Alliance for Minority Participation (NYC LSAMP) in Science, Technology, Engineering and Mathematics (STEM) is to increase CUNY's annual baccalaureate degree production among underrepresented groups (African-American, Hispanic, Native American and Pacific Islanders). The NYC LSAMP involves 17 of CUNY's 18 academic campuses. The Alliance Undergraduate Research Program is the heart of the NYC Alliance. The program includes research experiences on or off CUNY campuses, research enrichment and career development.



LSAMP PROGRAM ACTIVITIES

- Research Assistantships for LSAMP Scholars
- Undergraduate Research Fellowships
- Summer Undergraduate Research Experiences
- Peer and Faculty Mentoring
- International Research Training
- The Urban University Series Conference
- The Global CUNY Conference
- NASA Summer and Academic Year Collaborations
- Brookhaven National Labs Research for Students and Faculty

STANDARD ELIGIBILITY

Full time students who are U.S. citizens or permanent residents and are Black/African-American, Hispanic, American Indian, Alaskan Native or Native Pacific Islander, are eligible for LSAMP research assistantship.

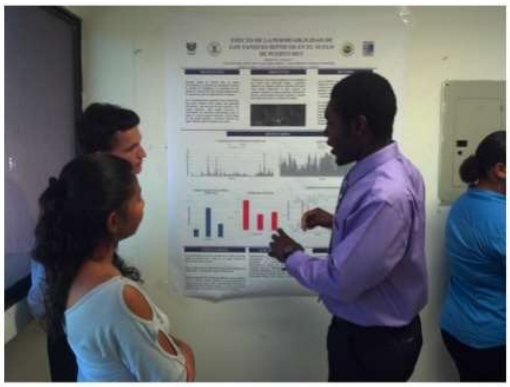
UNDERGRADUATE RESEARCH ASSISTANTSHIP PROGRAM

Community College

- Earned at least 12 credits, including at least one credit bearing course leading to a STEM major and completed with a B or better
- Minimum GPA of 2.8

Senior College

- Majoring in a STEM discipline, with B average of better in STEM courses
- Minimum GPA of 3.0



For additional information, contact the LSAMP Office
212-650-8854
160 Convent Avenue, Marshak 529, NY, NY 10031
EMAIL: ampcc@ccny.cuny.edu

The New York City Louis Stokes Alliance
The City College of New York
138th Street and Convent Avenue, MR-529
New York, NY 10031
ampcc@ccny.cuny.edu/212-650-8854

MATHEMATICS DAY

CHAIR'S CORNER

Dear Participants:

On behalf of the Mathematics Day Organizing Committee, the Mathematics Department, all Collaborators, and Sponsors, I am pleased to welcome you to the 3rd Annual Mathematics Day @ Hostos.

This year's theme "Demystifying Learning Mathematics – A quest to find out how we all can excel at Mathematics" is an invitation to raise community awareness on how Mathematics plays a fundamental role in our lives, independent of the discipline one decides to pursue. This event offers different venues for students, faculty, and administrators to experience mathematics, such as speakers, presenters, panels, interactive activities, and this year's new component "feature contributions", all designed for you to explore and share the meaning and importance of mathematics in a person's life.

In previous years we have recognized the work of faculty mathematicians who have helped build mathematics and STEM opportunities at Hostos with life service awards, as well as awards for our outstanding Peer Leaders. This year, we are recognizing individuals who are not mathematicians, and yet they exemplify through their life's work, the use of mathematics, to promote progress and opportunity for our students and for the institution, and who have supported mathematics and the initiatives of the Mathematics Department across all disciplines. Our award recipients will share with us their experience. This is another extraordinary opportunity that you will have during the day, to learn how mathematics can make a difference in a person's life and in society.

Finally, I would like to express my deepest gratitude to all who made this event possible. Thanks to all for making of this a unique celebration of Mathematics at Hostos.

We hope this event will motivate you to demystify learning mathematics in your life, to look at it through the lenses of your field of study, and to discover how to use it to support the achievement of your dreams!

Thank you very much.

Sincerely,

Clara Nieto-Wire. Ph.D

Event Coordinators &

Chair of the Mathematics Day Organizing Committee

EVENT SCHEDULE

9:45-10:00am **Registration**

OPENING CEREMONY

10:00-10:50am

Welcome

Clara Nieto-Wire, Ph.D.
3rd Annual Mathematics Day @ Hostos Event Coordinator
Mathematics Department

Opening remarks

Felix Cardona, J.D., Assistant Dean of Academic Affairs
Ann Mester, Ph.D., Associate Dean of Academic Affairs
Thierno Diallo, President of the Student Government Association
Nieves Angulo, Ed.D., Chair of the Mathematics Department

Mathematics Day Awards Presentation

Administrator Award Recipient

Presenter: Terence Brenner, Ph.D., Mathematics Department
Award recipient: Esther Rodríguez-Chardavoyne, M.B.A., Senior Vice President of Administration and Finance

Faculty Award Recipient

Presenter: Daniel Maysonet, Ph.D., Mathematics Department
Award recipient: Cynthia Jones, M.A., English Department

SESSION 1

11:00-12:15pm **Session Chair -** Kate Wolfe, Ph.D., Behavioral and Social Sciences

Faculty Presentations

- *Andragogy – Putting the "Adult" in Teaching and Learning to Maximize the Power of Learner Engagement*
  Denise Cummings-Clay, Ph.D., Education
- *Conquer Math, and Reap the Rewards!*
  Andrew Green, M.B.A., Quantitative Reasoning Fellow at HCC
- *Never Give Up – Divide and Conquer*
  Tanvir Prince, Ph.D., Mathematics

Panel Discussion

"*Voices from the Students: Mathematics - Personal Views and Experience*"
Moderator: Ann Mester, Ph.D., Associate Dean of Academic Affairs
Panelists: Diallo Thierno - Mathematics - HCC
Swimi Kolancheril, Electrical Engineering - HCC
Tounkara Kaba, International Studies – CCNY (HCC Alumni).
Tamilee Pérez, Business Management – HCC
Barry Ford, Mathematics – HCC
Ibrahima Doukoure, Electrical Engineering - HCC

Table Exhibits

- *"Origami"*
  James Kennis, Ph.D., Mathematics
- *"Table Games and Playful Mathematics"*
  Ramón Gómez, M.A., & Armando Amador, M.A., Mathematics
- *"3D Printing"*
  Yoel Rodríguez, Ph.D., Natural Sciences
  Students: Swimi Kolancheril, Abraham Ferrera, Mohamed Sajath, Keneil Fearron
- *"Simulations of Stars' Implosion Due to Unbalanced Forces"*
  Moise Koffi, Ph.D., Mathematics
- *"Artificial Intelligence for Concrete Crack Inspection"*
  Biao Jiang, Ph.D., Natural Sciences
  Students: CSTEP
- *"Vedic Mathematics"*
  Lauren Wolf, Ph.D., & Edme Soho, Ph.D., Mathematics
- *"Understanding Our Exposure to Electromagnetic Energy "*
  Manuel Livingston, M.S.Ed., Allied Health-Radiology
- *"Math Murder Mysteries"*
  Terence Brenner, Ph.D., Mathematics

Refreshments will be serve

SESSION 2

12:30-1:45pm

Session Chair - Moise Koffi, Ph.D., Mathematics

Faculty Presentations

- *HAIKU TO PIKU to PIEM – A QUEST FOR POETRY*
  Cynthia Jones, M.A., English
- *The need to know. Applications of math in health, safety and real-life*
  Manuel Livingstone, M.S.Ed., Allied Health - Radiology
- *Using Math to Determine the Effectiveness of an In-Class Exercise*
  Antonios Varelas, Ph.D., Behavioral and Social Sciences

Panel Discussion

"*Voices from the Faculty: Mathematics - Personal Views and Experience*"
Moderator: Felix Cardona, J.D., Assistant Dean of Academic Affairs
Panelists: Nancy Genova, M.P.A., Behavioral and Social Sciences- Public Admin. - HCC
Jaqueline DiSanto, Ph.D., Education – HCC
Antonios Varelas, Ph.D., Behavioral and Social Sciences -Psychology - HCC
Manuel Livingstone, M.S.Ed., Allied Health-Radiology - HCC
Edme Soho, Ph.D., Mathematics - HCC
Olen Dias, Ph.D., Mathematics - HCC

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  Terence Brenner, Ph.D. Mathematics

Refreshments will be serve

SESSION 3

2:00-3:15pm

Session Chair - Inzamamdeen Kassim, Vice President of the Student Government Association

Faculty Presentations

- *Never Give Up – Divide and Conquer*
  Tanvir Prince, Ph.D., Mathematics
- *The Engineering Interpretation of Math Formulas*
  Gaffar Gailaini, Ph.D., Mechanical Engineering Technology (City Tech)
- *The Secret Origin of My Math Murder Mysteries*
  Terence Brenner, Ph.D., Mathematics

Panel Discussion

"*Voices from Programs and Student Support Services - Personal Views and Experience*"

Moderator: Claude Brathwaite, Ph.D., Project Administrator, NYC Louis Stokes Alliance for Minority Participation (LSAMP)

Panelists: Moise Koffi, Ph.D., Director, CSTEP - HCC
Gaffar Gailaini, Ph.D., Director, Center of Medical Devices and Additive Manufacturing – City Tech
Isabel Li, M.Phil., Director, HALC
Elizabeth Wilson, Director, School-College College Partnerships - HCC
Lauren Millin-Moore, M.S.W., Associate Director, ASAP – HCC
Reginald Dorcely, M.A., Coordinator, CRSP/LSAMP - HCC

Table Exhibits

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Refreshments will be serve

SESSION FOR FACULTY, STAFF & ADMINISTRATORS

3:45-4:45pm

Faculty Dining Room (FDR)

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

Session Remarks
Office of Academic Affairs
Christine Mangino, Ed.D., Provost and Vice President for Academic Affairs

General Education Committee
Cynthia Jones, M.A., Chair of the General Education Committee

Mathematics Department
Nieves Angulo, Ed.D., Chair of the Mathematics Department

Celebration
Accomplishments of 3 years of Mathematics Day at Hostos
Clara Nieto-Wire, Ph.D., Event Coordinator & Chair of the Mathematics Day Organizing Committee

Open Discussion
Demystifying Learning Mathematics – A quest to find out how we can all excel at Mathematics
Nancy Genova, M.P.A., Behavioral and Social Sciences- Public Administration

Feature Slide Show
Tanvir Prince, Ph.D., Mathematics Department

SESSION 4

5:30-6:45pm

Session Chair - Clara Nieto-Wire, Ph.D., Mathematics

Closing Remarks
Nieves Angulo, Ed.D., Chair of the Mathematics Department
Diallo Thierno, President of the Student Government Association

Faculty Presentations
- *Applying Mathematics to our Daily Lives*
  Claude Fernández, M.B.A., Business
- *How Management Skills in Public Administration Can Set You Apart from Your Peers in the Job Market; Budgeting & Data is Included*
  Nancy Genova, M.P.A., Behavioral and Social Sciences- Public Administration
- *Artificial Intelligence for Concrete Crack Inspection*
  Biao Jiang, Ph.D., Natural Sciences

Panel Discussion

"*Voices from the Faculty*"
Moderator: Clara Nieto-Wire, Ph.D., Mathematics—Electrical Engineering – HCC
Panelists: Kate Wolfe, Ph.D., Behavioral and Social Sciences – HCC
Karen Steinmayer, Ph.D., Behavioral and Social Sciences – HCC
Biao Jiang, Ph.D., Naturals Sciences – HCC
Kathleen Ronca, D.N.P., Allied Health – Nursing - HCC
Ruili Ye, Ph.D., Mathematics - HCC
Dionicio Taveras, M.A., Mathematics - HCC

Table Exhibits

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  James Kennis, Ph.D., Mathematics
- "*Table Games and Playful Mathematics*"
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- "*Math Murder Mysteries*"
  Terence Brenner, Ph.D., Mathematics

Refreshments will be serve

NEW YORK STATE CSTEP

COLLEGIATE SCIENCE & TECHNOLOGY ENTRY PROGRAM

preparing science, technology & licensed professionals since 1986

Program Description:

The Hostos Community College Collegiate Science and Technology Entry Program (CSTEP) is designed to increase the number of historically underrepresented and economically disadvantaged students pursuing careers
leading to professional licensure or professions in mathematics, science, technology, engineering and health-related fields.
CSTEP provides students with academic enrichment, internship, and research experiences in science, mathematics, engineering, and technology
content areas.
The Program consist of summer and academic year components including:

- Research and Internship experiences
- Conferences and poster presentations
- Tutoring in gateway STEM courses
- Academic and career development

workshops, and advisement

Staff:

Dr. Moise Koffi – Director – Ext: 7461
Mrs. Diandra Jugmohan – Co-Director – Ext: 6773
Ms. Briseida Cortez – Coordinator – Ext: 6774
Mr. Reginald Dorcely – Research Advisor – Ext: 6629

Upcoming Events

Robotics Workshops: Tuesdays and Thursdays –2:30pm
20th Annual STEP Conference – March 23rd – 25th
26th Annual CSTEP Conference – April 13th – 15th
Mini Poster Presentation – April 9th
End of Semester Social – May 17th

The Collegiate Science and Technology Entry Program

Exploring Careers in STEM

Science, Technology, Engineering, & Mathematics

Tutoring
Internships
Research

Mentoring
Networking

Technology

CSTEP Provides Academic Enrichment and Research experience in STEM disciplines

Contact Information:
Location: 475 Grand Concourse -A126
Phone: 718- 518-6774
Website: www.hostosproyectoaccess.org

MATHEMATICS DAY AWARD RECIPIENTS

CYNTHIA JONES

"...over 40 years ago I joined the Hostos family. I fell in love with my ESL students and have remained here to serve all students. I am passionate about my teaching and my Hostos family. It is a privilege to be here."

Cynthia Jones began her tenure at Hostos Community College in 1977 as an adjunct in the English Department teaching ESL reading courses of beginning, intermediate, and advanced levels. She was appointed as a full-time Lecturer in 1981 and has taught the full range of English course offerings such as Developmental Reading, Core English, Expository Writing, Literature & Composition, and an elective, Literature of the Black American. She particularly enjoys teaching developmental courses and the English elective.

Cynthia Jones earned a Master of Arts in Curriculum and Teaching from Teachers College, Columbia University; and she received a Bachelor of Arts in Early Childhood-Elementary Education, Reading from Adelphi University.

Professor Jones takes great pride that she was recognized as the 2014 New York Professor by the *Carnegie Foundation for the Advancement of Teaching and the Council for Advancement and Support of Education*. In 2015, the *Bronx Times Reporter* named her one of *25 Influential Women of the Bronx*.

ESTHER RODRIGUEZ-CHARDAVOYNE

Esther R. Chardavoyne has served as the Vice President of Administration & Finance at Hostos Community College since February 2000. Trained as a Certified Public Accountant and with a career in finance spanning both private and public sectors, Senior Vice President Chardavoyne has overseen the financial management of several educational institutions.

SVP Chardavoyne earned a BBA , and MBA. She also has earned certificates from the Harvard Graduate School of Education, Institute for Community College Development, and ILR School of Cornell University. Her work in the field of finance began at Price Waterhouse LLP, and has been followed by over twenty years serving not-for-profit, public education institutions. In her role as Assistant Controller for the City University of New York, SVP Chardavoyne was in charge of implementing an accounting and budget system. At the New York City Department of Education (formerly the Board of Education), she was responsible for consolidating all of that agency's financial data—including seven separate payrolls—into one system, providing centralized and unambiguous data that allowed the accounting system to generate transactions and provided better control and oversight of the Department's budget. In 1998, SVP Chardavoyne started at Hostos, hired as the Associate Dean of Administration and Finance.

At the beginning of her term as Vice President of Administration and Finance, SVP Chardavoyne was faced with to funding cuts imposed by the city and state in addition to an already unstable fiscal situation at the College. Working with the President and the other Vice Presidents at the College, she responded to the challenge by formulating strategies that would minimize the fiscal impact on teaching and learning by focusing cuts within administrative services. Through the establishment of annual balanced budgets, aggressive cost-cutting initiatives and the computerization of several business functions, Hostos has gained a reputation within the CUNY system for fiscal responsibility. Additionally, the precedent set by the massive overhaul of outdated technology that took place under her guidance has led to recognition of Hostos as a leader in CUNY for the use of current and cutting-edge technology. In her tenure, SVP Chardavoyne has been an enthusiastic and effective leader at the college, serving as an executive team member for Hostos's 2011 Middle States self-study; spearheading the Hostos Amended Master Plan; and continually working with all of divisions and departments at the College in the implementation of the College's Strategic Plans.

HOSTOS STEM RESEARCH PROGRAMS

CUNY Research Scholars Program (**CRSP**) and other Science, Technology, Engineering, and Mathematics (STEM) programs at Hostos Community College focus on encouraging community college students' participation in authentic research and increase persistence in STEM disciplines. For this purpose, CRSP has been providing funded laboratory experiences for more than 25 Associate degree students majoring in STEM disciplines over a one-year period since 2014. CRSP students have been participating making oral and posters presentations throughout the country.

The Proyecto Access **CSTEP** Research Initiative (**PACRI)** is an intensive two (2) semester research experience with the objective of enhancing research skills of minority/underrepresented students pursing careers in STEM and license professions. Students are paired with a faculty mentor, attend research workshops and fieldtrips, and present their research topics at the CSTEP Statewide Conference and other research conferences and events.

Former and Current CRSP/CSTEP Research Faculty Mentors

Dr. Tanvir Prince, Mathematics

Dr. Edme Soho, Mathematics

Dr. Moise Koffi, Mathematics

Dr. Lauren Wolf, Mathematics

Dr. Anders Stachelek, Mathematics

Dr. Clara Nieto-Wire, Mathematics

Dr. Alexander Vaninsky, Mathematics

Dr. Francisco Fernandez, Natural Sciences

Dr. Chanh Phan, Natural Sciences

Dr. Debasish Roy, Natural Sciences

Dr. Damaris-Lois Lang, Natural Sciences

Dr. Yoel Rodriguez, Natural Sciences

Dr. Biao Jiang, Natural Sciences

Dr. Allison Franzese, Natural Sciences

Dr. Anna Manukyan, Natural Sciences

Contact Information:

Dean Felix Cardona, Office of the Academic Affairs Hostos Community College

For more information, please contact Prof. Dorcely at rdorcely@hostos.cuny.edu- x6629

USE OF MATHEMATICS TO OBSERVE TRENDS IN TEST DATA TO HELP SOLVE A PROBLEM WITH FORMATION OF CRYSTALS THAT HINDERED CONVERSION OF URINE INTO WATER ON INTERNATIONAL SPACE STATION (ISS)

By Doug Wingard

During college as both an undergraduate and graduate, Doug Wingard took numerous courses in mathematics and applied mathematics. In his work at NASA, he most often uses applied mathematics. With his experience in testing spaceflight materials for thermal properties, he often looks at mathematics in a "visual" sense for observing data trends—particularly in failure analysis involving materials. Here is one example of this:

Formation of crystalline solids that hindered conversion of urine into water on International Space Station (ISS)

The Distillation Assembly (DA) is the heart of the Urine Processor Assembly (UPA) on ISS for converting acid-treated urine into drinkable water (see schematic of the UPA in Figure 1 and a view of the DA in Figure 2). In 2009, the DA became flooded on orbit, and that DA was returned to MSFC for disassembly and inspection. It was found that the DA evaporator contained a significant quantity of solids which had not allowed concentrated liquid leftover from distillation to be removed from the DA. By elemental analysis via scanning electron microscopy (SEM), the dried solids were shown to contain high and roughly equal atomic percentages of calcium and sulfur. Further analysis by infrared spectroscopy indicated that these high percentages of calcium and sulfur were in the family of "sulfates." Therefore, it was deduced that the solids were likely calcium sulfate, and SEM images indicated they contained crystals (Figure 3). The calcium was present in urine primarily due to bone loss from the astronaut crew in space. Sulfur, or sulfate, was present primarily due to the use of sulfuric acid in pretreatment of the urine to inhibit microbial growth.

A search of technical literature showed that researchers had tested crystalline samples of calcium sulfate with a differential scanning calorimeter (DSC). Figure 4 shows a picture of a DSC. Dried samples of calcium sulfate were also tested at MSFC with a DSC, with results shown in Figure 5.

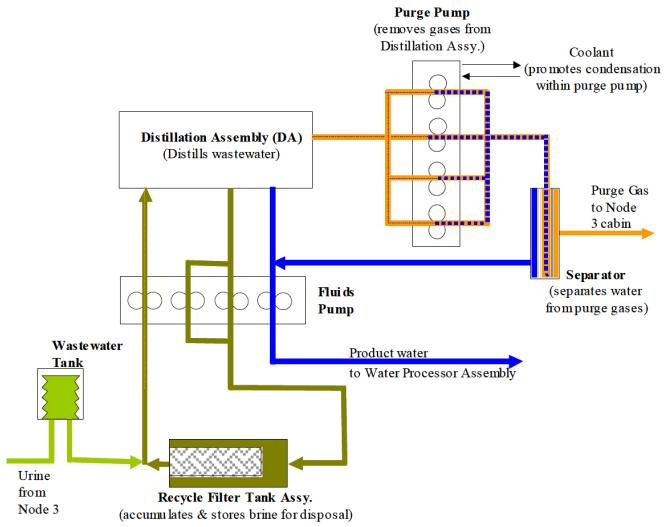

Figure 1. Schematic of the Urine Processor Assembly (UPA) on ISS. Urine plus flush water has a pretreatment formula containing chromium trioxide and sulfuric acid to control microbial growth and control the reaction of urea to ammonia. The Distillation Assembly (DA) is the heart of the UPA where the waste urine stream is evaporated at low pressure and condensed on the opposite side of the surface. A rotary lobe compressor provides the driving force for evaporation and compression of water vapor. Waste brine solution resulting from the distillation process is stored in the Recycle Filter Tank Assembly (RFTA). Gases and condensed water are pumped to a separator which recovers and returns water to the product water stream.

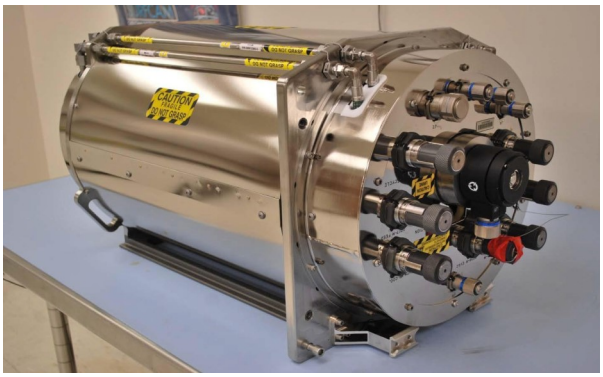

Figure 2. (a) At top is a detailed view of the Distillation Assembly (DA) used in the Urine Processor Assembly (UPA) on International Space Station (ISS).

(b) At bottom is astronaut Jeff Williams installing a DA into the UPA on ISS.

The sulfuric acid-treated urine on ISS also contained flush water, as well as a chromium trioxide oxidizer. In such an aqueous-based solution, the calcium sulfate would eventually become fully hydrated. A search of technical literature also indicated that fully hydrated calcium sulfate is known as calcium sulfate dihydrate, or $CaSO_4 \bullet 2H_2O$. Dehydration of calcium sulfate dihydrate, also known as "gypsum," occurs in two steps:

$$CaSO_4 \bullet 2H_2O \rightarrow CaSO_4 \bullet 0.5H_2O + 1.5H_2O \qquad (120\text{-}170^\circ C)$$

$$CaSO_4 \bullet 0.5H_2O \rightarrow CaSO_4 + 0.5H_2O \qquad (170\text{-}210^\circ C)$$

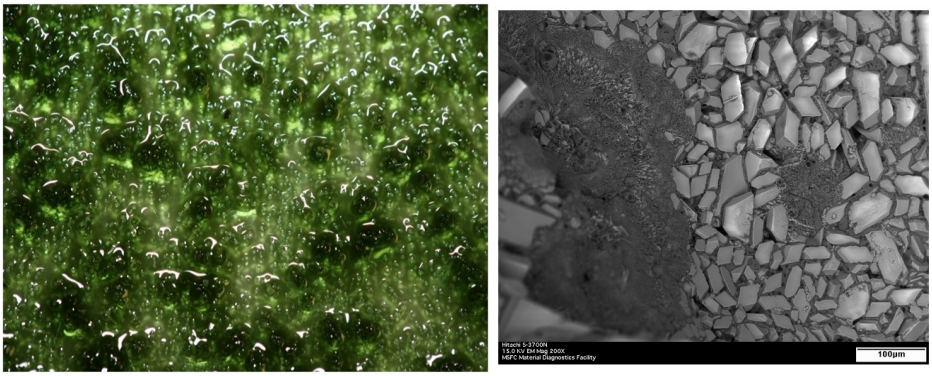

Figure 3. (a) At left is dark precipitated solids in brine solution collected in the RFTA on ISS. The liquid has a green color due to the conversion of chromium trioxide into chromic acid and chromium hydroxide in the aqueous-based solution.

(b) At right is dried precipitated solids taken from the RFTA on ISS that were analyzed at 200X magnification in a scanning electron microscope (SEM). Imbedded in the solid material is some crystals that were determined to calcium sulfate dihydrate .

The chemical equations for the two-step dehydration of calcium sulfate dihydrate can be observed in the DSC data in Fig. 5. The green curve represents fully hydrated crystals removed from the Recycle Filter Tank Assembly (RFTA) on ISS. Dehydration is an endothermic process (heat absorbed), and the convention is for the peaks pointing downward in Fig. 5. The peak values at 178°C and 195°C represent the two-step dehydration of calcium sulfate dihydrate shown in the chemical equations above. This dehydration process involves the loss of two moles of 'water of hydration' that are chemically bound to the calcium sulfate. But, this water of hydration can be released by heating the sample in DSC at a constant rate.

Figure 4. The same type of Differential Scanning Calorimeter (DSC) used for this project. The cross-section diagram of a standard DSC cell uses a thermoelectric (constantan) disk as the primary means of transferring heat to the pans sitting in the sample and reference positions. As heat is transferred through the disk, the differential heat flow to the sample and reference pans is measured by thermocouples.

The less prominent endothermic peak at 135°C in the green curve was somewhat perplexing. Yet, another search of technical literature for additional DSC testing by researchers showed the peak at 135°C very likely to be hydrated calcium sulfite, which when fully hydrated is known as calcium sulfite hemihydrate, or $CaSO_3 \bullet 0.5H_2O$. In the presence of oxygen, calcium sulfite hemihydrate can convert to calcium sulfate dihydrate (gypsum) by the following equation:

$$CaSO_3 \bullet 0.5H_2O + 0.5O_2 + 1.5H_2O \rightarrow CaSO_4 \bullet 2H_2O$$

On ISS, the crew cabin is an oxygen-rich atmosphere compared to normal breathing air on Earth. As the DSC data in Fig. 5 shows for the green curve, there was a strong presence of calcium sulfate dihydrate in the dried crystal sample, with a lesser presence of calcium sulfite hemihydrate.

In Fig. 5, the DSC curves in brown and red represent samples from a test on a ground, developmental unit of the UPA at MSFC. At MSFC, a 30-day test was performed to precipitate crystals that were hopefully similar to those observed from ISS. From this test, precipitated solid samples were taken from the RFTA about every 5 days up to 30 days. After this test, internal solids from the DA evaporator were also removed. The brown curve represents a dried solid sample removed after 20 days, and the red curve represents DA internal solids. Even though the same chemical equations shown above were represented from the 30-day test at MSFC, the DSC data showed there was less conversion of $CaSO_3 \bullet 0.5H_2O$ to $CaSO_4 \bullet 2H_2O$ from the ground test than in actual operation on orbit in ISS.

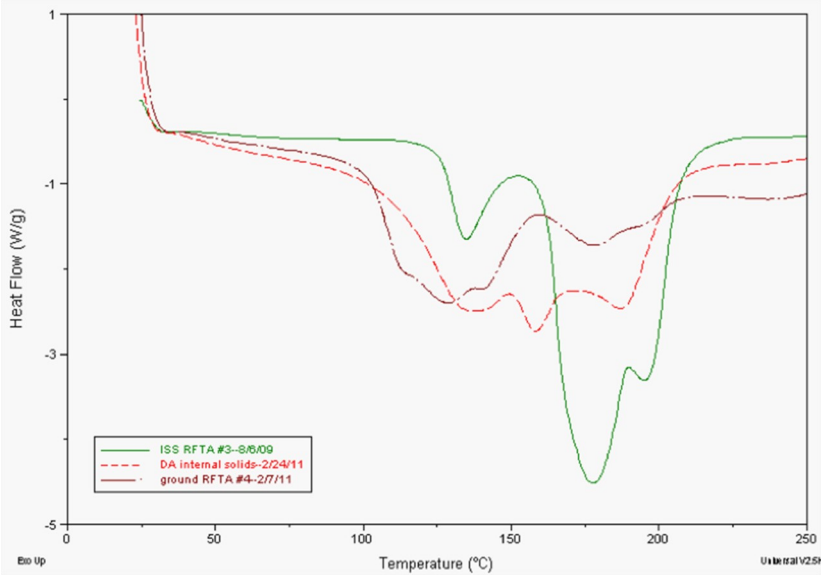

Figure 5. Data with a differential scanning calorimeter (DSC) on dried crystalline samples taken from: (a) International Space Station UPA (green curve), (b) developmental UPA (brown curve) and (c) DA internal solids of the developmental UPA (red curve).

ABOUT THE AUTHOR

Doug Wingard *- NASA Marshall Space Flight Center (MSFC) - Material Test, Chemistry & Contamination Control Branch*

Mr. Wingard has worked in materials science and engineering at NASA/MSFC in Alabama for almost 29 years, mostly in the areas of materials characterization, selection and failure analysis. He specializes mostly in non-metallic materials, particularly polymers, and typically tests such materials to determine thermal properties on a bulk and molecular scale. He has experience in understanding physical properties of rubber and rigid polymeric seal materials for O-rings and gaskets, and how factors such as temperature, stress, environment and materials processing affect seal performance. He has tested non-metallic materials for compatibility with various liquids, and has used modulus as a parameter to predict long-term aging of such materials. He also has experience in testing porous inorganic materials for gas adsorption to evaluate their effectiveness in adsorbing carbon dioxide and water vapor from breathing air for astronauts on International Space Station (ISS).

CUNY BMI
THE CITY UNIVERSITY OF NEW YORK BLACK MALE INITIATIVE

BMI TEAM is a CUNY wide program designed to unite Black and Latino STEM majors in order to enhance the experience of incoming freshmen and upperclassmen. 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 w**E** **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.

Mentors will guide incoming freshmen, showing them how to juggle ever increasing workloads and other aspects of school life. These mentors are veterans of college life and will be invaluable support nets who will be available for one on one talks. Our specialized tutors will help freshmen with STEM coursework and provide additional tips to help them with their exams throughout the semester.

Events and conferences will serve not only as a means of networking and reflection, but also as information sessions regarding careers in the STEM fields, research opportunities, scholarships, and workshops. BMI TEAM is a program found in other CUNY schools and as such, we will be in frequent contact with these other BMI programs.

BMI TEAM looks toward becoming a widespread and welcome presence on campus, increasing the presence of minorities in the STEM fields!

To become a BMI TEAM Member:

1. Be a freshmen or incoming freshmen pursuing one of the STEM Majors (Engineering, Liberal Arts in Science, Mathematics, Forensic Science)
2. Fill out the following intake form: https://drive.google.com/open?id=1YNm566Q7JD49fJGINSrqpyz8dLd1Yyk16dZ9zDxcN1o

For more information, contact:
Chistian Huacón, Program Coordinator
Room A507
HostosBMITeam@gmail.com

Hostos Community College 50 1968 2018

PRESENTATION ABSTRACTS

SESSION 1

Andragogy – Putting the "Adult" in Teaching and Learning to Maximize the Power of Learner Engagement

Presenter:
Denise Cummings-Clay,
Assistant Professor, Education Department

Learners, including adult learners, learn in superior ways when they are encouraged and inspired. Thus, the way to guarantee the achievement of higher education learners is first to know what motivates and supports them in the learning process. Based on a study, conducted in 2015 of 203 university students and of findings published in the International Journal of Higher Education, there are eight factors deemed critical to enhancing the will power in students in higher education toward successful learning. The presentation will focus on defining "Andragogy" and explain its origins, discuss the differences in the characteristics of youth versus adult learners, and differentiate between "Pedagogy" and "Andragogy."

Conquer Math, and Reap the Rewards!

Presenter:
Andrew Green,
Quantitative Reasoning Fellow, CTL

The sight of math causes anxiety for some students, and indeed some teachers and professionals as well. I would like to offer encouragement, by sharing my own story and making the case math is actually fun, kind of like a game or puzzle. You should not let it intimidate you. I would like to draw attention to how necessary proficient math skills are in all professions today, and even life itself, and to share some statistics on the value of quantitative skills and a quote or two from respected people of industry.

Never Give Up – Divide and Conquer

Presenter:
Tanvir Prince,
Associate Professor, Department of Mathematics

You may learn many formulas and theorems in your lifetime but it is the techniques that stay with you. One of the common techniques that are used in STEM is divide and conquer. In this presentation, I will describe my personal story about how I overcame a great barrier as a student using the technique of "Divide and Conquer."

SESSION 2

Haiku to Piku to Piem – A Quest for Poetry

Presenter:
Cynthia Jones,
Lecturer, English Department

Poetry is an accessible form of expression. In conducting research on pi, the presenter discovered creative ways of thinking about math through poetry. She will share poems, pikus, and piems in celebration of PI!!

The Need to Know. Applications of Math in Health, Safety and Real-Life

Presenter:
Manuel Livingston,
Assistant Professor, Radiologic Technology Dept.

Is the body-scanner machine at the airport safe? Will I get sick from having too many x-rays? Will my cell phone make me sick? This presentation will discuss common measurements used in every-day life and their correlation with formulas and mathematical models used in the medical and public safety field. Particular attention will be made in quantifying exposure to natural and man-made radiation and identifying safe exposure parameters to the public.

Using Math to Determine the Effectiveness of an In-Class Exercise

Presenter:
Antonios Varelas,
Assistant Professor, Behavioral Sciences

Prof. Varelas will present his research on Clicker Technology in the classroom, and they will explain the role of Mathematics in this work.

SESSION 3

Never Give Up – Divide and Conquer

Presenter:
Tanvir Prince,
Associate Professor, Department of Mathematics

You may learn many formulas and theorems in your lifetime but it is the techniques that stay with you. One of the common techniques that are used in STEM is divide and conquer. In this presentation, I will describe my personal story about how I overcame a great barrier as a student using the technique of "Divide and Conquer."

The Engineering Interpretation of Math Formulas

Presenter:
Gaffar Gailani,
Associate Professor and Director of Center of Medical Devices and Additive Manufacturing, Dept. of Mechanical Engineering and Industrial Design Technology, NY City College of Tech.

Many students think of math formulas as a puzzle that have no solution and beyond their intellectual abilities. Thus, they place a great barrier between them and math. Our students will be surprised to know that the engineering interpretation or application of these math formulas might be easier than the computer games and codes they playing. In this presentation an example of math formulas will be casted to engineering applications in materials and heat transfer. Understanding this relationship will help students visualize what these math formulas can do.

The Secret Origin of my Math Murder Mysteries

Presenter:
Terence Brenner,
Associate Professor, Mathematics Department

Having read many math word problems, I've noticed that all of the math word problems in the textbooks have all looked the same, and students have become bored, and they haven't even bothered to have read them. I had decided to use the same type of problems, but I have put them in a murder mystery setting. The idea is that students would rather solve a murder mystery then do a straight math word problem. I have introduced the mysteries with one mystery that can be done without using equations. I have then made all of the other mysteries more complicated so that students will find them interesting, and challenging. The students have formed groups, and they have worked together in the group so that they can solve the mystery. I have given them a list of suspects, but the difference is that the list of suspects is actually the names of the students themselves! The students have enjoyed seeing their names on the list, and it definitely has kept them motivated to continue to read the word problem and for them to stay with it until they have solved it. To always keep the mysteries fresh, I have used a different student's name from the list each time I have given the word problem to the students.

SESSION 4

Applying Mathematics to Our Daily Lives

Presenter:
Claude Fernandez,
Assistant Professor, Business & Accounting Unit

Professor Fernandez will discuss his perspective on how Mathematics can help clarify concepts by illustrating relationships and quantifying them. If we can view numbers as helping to clarify, should there really be a fear of Mathematics? His discussion will address some basic issues including how to read business ratios, an analysis of the pricing of Metrocards, and how the ability to quantify the concept of time value of money can affect decisions we make.

How Management Skills in Public Administration Can Set You Apart from Your Peers in the Job Market; Budgeting & Data is Included

Presenter:
Nancy Genova,
Assistant Professor, Radiologic Technology Dpt.

The study of Public Administration prepares students for working in government or non-profit fields. It entails many skills sets because the academic study prepares students to

become public administrators who will be in charge of government agencies and non- profits that implement; education, health, defense, criminal justice, economic development, infrastructure, and human services. Public Administrators also develop and analyze policies. In government and in the non-profit arena services are determined and delivered based on the budget. This requires ability to analyze, interpret, and report on the budget. In addition to the budget public administrators are required to understand data to interpret effectiveness of the programs they administer and identify gaps in services.

The presentation will entail an overview of the academic discipline of the public administration. The audience will view an actual budget and data reports used in a government funded and non- profit programs.

Artificial Intelligence for Concrete Crack Inspection

Presenter:
Biao Jiang,
Assistant Professor, Natural Sciences Department

Concrete infrastructure is commonly used around the world. Over time it begins to weaken, which lead to cracks in the concrete. Since this situation is very common, the cracks can remain unnoticed for a prolonged period of time. A new proposal has emerged to apply the deep learning technique to recognize, inspect, and treat cracks on time. A database is created by extracting the cracks on a generous number of cracking pictures, and used to train the proposed machine learning algorithm. So the trained algorithm can analyze unprocessed graphs and detect cracks and spalls. The results obtained from the detection of cracks by the algorithm will help engineers to notice cracks and spalls more efficiently in a con-crete infrastructure.

Title V Hispanic Serving Institutions Grant: *Adelante*

In October 2014, Hostos Community College received a five-year Title V grant totaling $2.5 million to increase student opportunities for success and to expand professional development opportunities for faculty through curriculum development and research.

The grant supports various Hostos' strategic plan goals, which focus on remedial and developmental student needs, first year student success, teaching and learning supports and leadership development for students and faculty as well as an increase in student performance, retention and completion rates.

Since fall 2014, Title V has provided access to a greater number of Hostos students to participate in Supplemental Instruction, Small Group Tutorials, and Research. Opportunities to increase faculty participation in professional development activities that include curriculum redesign, research and conference grants have also been a major focus of this grant.

STAFF

Silvia Reyes—Director—ext. 6637
Amalia Rojas Enriquez— Coordinator—ext.6871
Sarah Brennan—Faculty Activity Director—ext.6753
Lillian Correa—Program Associate—ext.2650

Upcoming Event

Summer Institute for Undergraduate Student Research

Two-week intensive introduction to research methods and tools for continuing Hostos students.

This intensive institute will engage students in scholarly work at the undergraduate level through seminars and tutorial-style sessions. Selected students will work under the guidance of a faculty mentor on a project of their own choosing. Student participants will develop individual, original research ideas, create a scholarly research paper or project and formally present their work to their peers at the end of the program.

The program will run June 6th through June 14th, 2018. Students will spend five-hour days – 10am to 3pm – with each other engaged in reading, writing, and critically thinking about their research topics.

Each student participant will receive $500.

Challenging minds
Inspiring futures
Hispanic Serving Institutions
Department of Education

For more information visit us in room B-419 or email us at

TitleV@hostos.cuny.edu

MATH MURDER MYSTERIES

By Terence Brenner

Having read many math word problems, I have noticed that all of the math word problems in the textbooks have all looked the same, and students have become bored, and they have not even bothered to have read them. I had decided to use the same type of problems, but I have put them in a murder mystery setting. The idea is that students would rather solve a murder mystery then do a straight math word problem. I have introduced the mysteries with one mystery that can be done without using equations. I have then made all of the other mysteries more complicated so that students will find them interesting, and challenging. The students have formed groups, and they have worked together in the group so that they can solve the mystery. I have given them a list of suspects, but the difference is that the list of suspects is actually the names of the students themselves! The students have enjoyed seeing their names on the list, and it definitely has kept them motivated to continue to read the word problem and for them to stay with it until they have solved it. To always keep the mysteries fresh, I have used a different student's name from the list each time I have given the word problem to the students. Here the reader will find four such mysteries. Can you solve them?

First Math Mystery of the Week

http://www.hostos.cuny.edu/departments/math/mat15/First-Mystery-of-the-Week-Math-Day.pdf

Special agent Jethro Gibbs has just discovered that if he multiplies the number of corpses by 5 he would have 15 corpses. He also stumbled onto the fact that if he divides the number of clues by 4 he would have 5. After a couple of days he learns that 3 more than number of motives is 6 and 8 less than the number of suspects is 4. Finally, 3 more than twice the number of weapons is 7. He must finish his investigation today. Please help him by setting up the equations, solving them and showing all the work. Special agent Gibbs now knows that the murderer's number is the sum of the number of corpses, clues, motives, suspects and weapons. Who did it?

CORPSES CLUES MOTIVES SUSPECTS WEAPONS

Table 1. List of who may have done it - First math mystery

1.Rivas, Nancy	10.Contin Josefina	19.Liranzo Ana	28.Obasuyi Michael O	37.Woddard Demond
2.Sanchez, Amelia	11.Cruz Rocio	20.Mack Sandra	29.Peralta Ramona	38.Yeta, Danjura
3.Santiago, Dolores	12.De La Cruz Nelly	21.Maldonado Anibal	30.Polanco Elaine F	39.Adeoba, Adetunji
4.Alicea,Lilian a	13.Dundas Natasha N	22.Mena Christian A	31.Ramos Judith	40.Alonzo, Orlando E
5.Burgos Jorge	14.Gomez Felina a	23.Molina Ana C	32.Rivera Pedro J	41.Bellinger Keenan L
6.Cabrera Luis	15. Guadarrama Virginia	24.Moreno Magdalena M	33.Rodriguez Maria D	42.Blunt Toni
7.Camacho , Anderson	16.Guillermo Quirci	25.Nicholas Rubia	34.Rosa Montano Betzaida	43.Canario, Maritza
8.Cedeno, Angela	17.Hernandez Rosa	26.Nieves David	35.Vassquez Luz	44.Castellanos, Michelle
9.Cepeda, Judy	18.Howard Emery L.	27.Nieves Deliris	36.Wilson George A	45.Cruz, Carlos M

Second Math Mystery of the Week

http://www.hostos.cuny.edu/departments/math/mat15/Second-Mystery-of-the-Week-Math-Day.pdf

Special agent Mcgee, taking over the cases for Special agent Gibbs, has just been handed case number 457. After looking at the file he discovers that three times the number of victims increased by seven is equal to nineteen. He also stumbled onto the fact that twice the difference of the number of witnesses and six is 10. After a few days he learns that the number of suspects is half the number of clues and they total 84. Special agent Mcgee remembers that he had a lot of cases and recalls that case number 's that had the same number of corpses where three consecutive case numbers whose sum was 57. What is odd is the case numbers that had the same number of weapons is the same for three consecutive odd case numbers, where twice the smallest case number added to the largest is 67. By accident, he realizes that the case numbers that had the same number of clues is the same for three consecutive even case numbers where twice the largest added to the smallest is 74. PLEASE HELP!!!!!!!!!!!!!!!! He must finish his investigation today. Set up the equations, solve them and show the work. Wait a minute, if he finds the average of the number of victims, witnesses, clues and the smallest number of case numbers for corpses, weapons and clues he will have the murderer's number. Who did it?

VICTIMS WITNESSES SUSPECTS AND CLUES CASE NUMBERS FOR CORPSES

CASE NUMBERS FOR WEAPONS CASE NUMBERS FOR CLUES

Table 2. List of who may have done it

1.Rivas, Nancy	10.Contin Josefina	19.Liranzo Ana	28.Obasuyi Michael O	37.Woddard Demond
2.Sanchez, Amelia	11.Cruz Rocio	20.Mack Sandra	29.Peralta Ramona	38.Yeta, Danjura
3.Santiago, Dolores	12.De La Cruz Nelly	21.Maldonado Anibal	30.Polanco Elaine F	39.Adeoba, Adetunji
4.Alicea,Lilian a	13.Dundas Natasha N	22.Mena Christian A	31.Ramos Judith	40.Alonzo, Orlando E
5.Burgos Jorge	14.Gomez Felina a	23.Molina Ana C	32.Rivera Pedro J	41.Bellinger Keenan L
6.Cabrera Luis	15. Guadarrama Virginia	24.Moreno Magdalena M	33.Rodriguez Maria D	42.Blunt Toni
7.Camacho , Anderson	16.Guillermo Quirci	25.Nicholas Rubia	34.Rosa Montano Betzaida	43.Canario, Maritza
8.Cedeno, Angela	17.Hernandez Rosa	26.Nieves David	35.Vassquez Luz	44.Castellanos, Michelle
9.Cepeda, Judy	18.Howard Emery L.	27.Nieves Deliris	36.Wilson George A	45.Cruz, Carlos M

Fifth Math Mystery of the Week - Murder at Con Ed

http://www.hostos.cuny.edu/departments/math/mat15/Second-Mystery-of-the-Week-Math-Day.pdf

Detective Sandy Freeze found a power line wrapped around the president of Con Ed's neck and found the following important fact: the ratio of fingerprints to clues is four to five. She found nineteen good fingerprints, how many clues are there? She remembers that she has to round off all her answers to the nearest whole number because the reports she files do not have decimal numbers. Wait a minute; she recalls that 12 12% of the number of suspects is three less than the number of weapons. How many suspects were there? After a few days she learns that the number of weapons is 62.5% of the number of clues. Is 62.5% a decimal number? How many weapons are there? Detective Sandy Freeze likes doing "higher Math-Calculus", so she wonders what percent of the suspects is the number of weapons? What is the percentage? Finally, she discovers that if she subtracts 80% of the number of weapons from 25% of the sum of the number of suspects and the number of clues, she will have the murderer's number. Who did it? Please help her, even though she doesn't want to find who killed the President of Con Ed. She still has to file the report and needs a lot of help in filling it out. Set up the equations and show her all your work while you're in a well-lit and warm room.

CLUES SUSPECTS WEAPONS

Table 3. List of who may have done it

1.Alexander,Jeanine Y	10.Felipe,Lesslly A	19.Pena,Estebania A	28.Shell,Neffertitti T	37.Woddard Demond
2.Aponte,Exson	11.Fryer,Bernadette	20.Perez,Kirsten	29.Smith,Dondrie	38.Yeta, Danjura
3.Cabanas,Jocelyn	12.Hall,Patricia M	21.Placencia,Daniel	30.Stevenson,Tiffany	39.Adeoba, Adetunji
4.Cabrera,Edward	13.Hernandez,Miriam	22.Quinones,Morgan	31.Valenzuela,Mayoris C	40.Alonzo, Orlando E
5.Castelblanco,Stephanie	14.James,Sabrina M	23.Ramirez,Kimberly C	32.Rivera Pedro J	41.Bellinger Keenan L
6.Concepcion,Arlin	15.Jones,Teseana	24.Riddle-Leon,Brianna	33.Rodriguez Maria D	42.Blunt Toni
7.Cruz,Christian X	16.Kouyate,Habib	25.Rodriguez,Shamira	34.Rosa Montano Betzaida	43.Canario, Maritza
8.Duran,Gustavo	17.Lopez,Sarah	26.Rymer,Stephanie	35.Vassquez Luz	44.Castellanos, Michelle
9.Dutan,Noemi J	18.Morales,Alex	27.Saldana,Sabrina B	36.Wilson George A	45.Cruz, Carlos M

Eighth Math Mystery of the Week - Murder at Lilco and Con Ed

http://www.hostos.cuny.edu/departments/math/mat15/Second-Mystery-of-the-Week-Math-Day.pdf

The now internationally famous Detective Sandy Freeze is called out of retirement for her most puzzling case yet, to solve another murder! She found the new President of Lilco and the new President of Con Ed with power lines wrapped around their necks. Does this sound familiar? After many days of questioning the management of Con Ed and Lilco, she finally has some information. Three times the number of Lilco answers less than twice the number of Con Ed's answers is two. Also, six times the number of Con Ed's answers less than nine times the number of Lilco's answers is four. What is the number of Con Ed's answers and the number of Lilco's answers? She thinks she is not getting the correct answers from management, Gee I'm surprised because they're usually are so good at communicating with the public. The workers tell her that the number of mad customers less than twice the number of happy customers is four. Also, one-third of the number of happy customers added to one-half the number of mad customers is six. Again with the fractions!! Shouldn't the number be in the thousands? After all her hard work, she finally discovers if she subtracts the number of happy customers from the number of mad customers she will finally know the murder's number. Who did it? Please let Detective Sandy Freeze go out in style by setting up and solving the equations. We will never see murder cases like these again or the likes of Detective Sandy Freeze again, or will we?

CON ED AND LILCO ANSWERS

HAPPY AND MAD COSTUMERS

Table 4. List of who may have done it

1.Rivas, Nancy	10.Contin Josefina	19.Liranzo Ana	28.Obasuyi Michael O	37.Woddard Demond
2.Sanchez, Amelia	11.Cruz Rocio	20.Mack Sandra	29.Peralta Ramona	38.Yeta, Danjura
3.Santiago, Dolores	12.De La Cruz Nelly	21.Maldonado Anibal	30.Polanco Elaine F	39.Adeoba, Adetunji
4.Alicea,Lilian a	13.Dundas Natasha N	22.Mena Christian A	31.Ramos Judith	40.Alonzo, Orlando E
5.Burgos Jorge	14.Gomez Felina a	23.Molina Ana C	32.Rivera Pedro J	41.Bellinger Keenan L
6.Cabrera Luis	15. Guadarrama Virginia	24.Moreno Magdalena M	33.Rodriguez Maria D	42.Blunt Toni
7.Camacho , Anderson	16.Guillermo Quirci	25.Nicholas Rubia	34.Rosa Montano Betzaida	43.Canario, Maritza
8.Cedeno, Angela	17.Hernandez Rosa	26.Nieves David	35.Vassquez Luz	44.Castellanos, Michelle
9.Cepeda, Judy	18.Howard Emery L.	27.Nieves Deliris	36.Wilson George A	45.Cruz, Carlos M

ABOUT THE AUTHOR

Terence Brenner **-** *Associate Professor, Mathematics Department - HCC*

Prof. Brenner has been at Hostos Community College for over thirty years. He received his Ph.D. in Mathematics from Yeshiva University. His Ph.D. is in Applied Mathematics-Quantum Mechanics. He has published three papers dealing with Quantum Mechanics. Some of his other publications have been at the Community college mathematics level. For example, one paper has been about a very easy and quick way for finding the LCD. Another paper deals with proving one trigonometric identity different ways. Over the years, He has taught: Mat 10, 15, 20, 100, 130, 150, 160, 210, and 220. The last book that he has written (2017), co-authored with D. Maysonet, is the textbook that is currently being used in Mat 150. He has been the editor of the Hostos Community College Mathematics Journal, which comes out once a year. Since its beginning, he also has had at least one paper in each edition of the journal.

THE Office of Student Activities

The Office of Student Activities creates and promotes out-of-class experiences for students. Student Activities interacts closely with the members of more that 50 student organization assisting in the areas of leadership skills training and event programming. Our collaborative efforts also include working with the elected leaders of the Student Government Association to register clubs and manage the student electoral process.

Math Day 2018 Club Sponsors:

- ENGINEERING CLUB
- MATH CLUB
- STEM CLUB

CONTACT:
Jerry Rosa, Director
450 Grand Concourse, C-371
Bronx, NY 10451
Phone: 718-518-6561
Web:

Hostos Community College 1968 2018

CUNY The City University of New York

PANELS — DESCRIPTIONS

Voices from Our Students: Personal Story and Mathematics

Panel Discussion – Session 1 (11:00 am – 12:15pm)

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.

Voices from the Faculty: Personal Story and Mathematics

Panel Discussion – Session 2 (12:30 pm – 1:45pm)

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.

Voices from Programs and Student Support Services: Personal Story and Mathematics

Panel Discussion - Session 3 (2:00pm – 3:15pm)

Panelists will share their views on the importance of the extracurricular activities and other supports that their programs offer to students, and how these add positively to an individual's successful academic journey. Panelist will also be invited to share with the audience the impact of Mathematics in their lives, and to provide tips on academic success to students based on their experience as program officers. Questions from the audience will be encouraged and allowed as much as time permits.

Voices from the Faculty: Personal Story and Mathematics

Panel Discussion – Session 4 (5:30 pm – 6:45pm)

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.

Student Government (SGA)

One of the main organizations that serves and represents the needs and interests of students at the Hostos Community College is the Student Government Association (SGA). SGA is comprised of sixteen (16) members, seven (7) of which serve as Executive Officers and nine (9) as Senators. SGA members are part of many important college-wide committees including the Hostos Association, College-Wide Senate, Auxiliary Enterprise Committee, Technology Fee Committee, Space Requests Committee and others. SGA organizes cultural, educational and social activities for the student body throughout the school year. It also assists student organizations in the planning and development of their activities.

SGA Executive Board

The members of the Student Government Executive Board shall be the SGA President, the Vice President for Academic Affairs, the Vice President for Student Affairs and Community Relations, the Budget and Finance Commissioner, the Executive Secretary and appointed by the SGA President with the Consent of the Hostos Student Senate an Evening and Part-Time Student Affairs Commissioner and a Campus Affairs Commissioner.

To learn more about the Student Government Association (SGA), visit one of the offices listed below or contact them via e-mail at studentgovernment@stu.hostos.cuny.edu.

General Information

- The SGA Conference Room is located in room C-534
- SGA mailboxes are located at the SGA Conference Room (C-534)
- All SGA Senate Meetings are open to Hostos Students and the college population
- SGA Elections are held annually in the Spring semester
- SGA members are elected to office for a one (1) year term

TABLE EXHIBITS — DESCRIPTIONS

Origami – Prof. James Kennis

Mathematics is experienced in everyday life activities. Most of us go through the day unaware of this fact. We welcome you to come and visit the "Origami" stand and experience Mathematics through hands-on activities.

Table Games and Playful Mathematics – Prof. Ramón Gomez

There is a playful aspect of Mathematics that is embedded in social activity. We invite you to visit "The Table Games and Playful Mathematics" stand and experience Mathematics through puzzles and patterns and see how much fun Mathematics can be!

3D Printing Exhibit – Prof. Yoel Rodríguez

What is 3D printing? - 3D printing is a process of making three-dimensional solid objects from a digital file. Today, 3D printing is widely used in the medical industry, aerospace and aviation industries, automotive industry and so forth. We welcome you to stop by our stand to find out how a 3D Printer works and its application. Join us and make your own printing!!!

Artificial Intelligence for Concrete Crack Inspection – Prof. Biao Jiang

Concrete infrastructure is commonly used around the world. Over time it begins to weaken, which lead to cracks in the concrete. Since this situation is very common, the cracks can remain unnoticed for a prolonged period of time. A new proposal has emerged to apply the deep learning technique to recognize, inspect, and treat cracks on time. A database is created by extracting the cracks on a generous number of cracking pictures, and used to train the proposed machine learning algorithm. So the trained algorithm can analyze unprocessed graphs and detect cracks and spalls. The results obtained from the detection of cracks by the algorithm will help engineers to notice cracks and spalls more efficiently in a con-crete infrastructure.

Simulations of Stars' Implosion Due to Unbalanced Forces – Prof. Moise Koffi

The concept of equations and inequalities (Pressure < Gravity) is demonstrated through the breaking balance of forces leading to the implosion of stars. This activity is conducted for the experimental simulation of the implosion of stars at the end of their lifecycle. Visit our stand to learn more about how Mathematics is used to study the implosion of the stars!

Vedic Mathematics – Prof. Lauren Wolf & Prof. Edme Soho

Vedic Mathematics is an ancient Indian method for computing otherwise long computational problems with quick easy tricks. We will be multiplying and squaring large numbers with ease. Professor Wolf and Professor Soho invite you to come to their stand and try some computations using this mysterious Math!

Understanding Our Exposure to Electromagnetic Energy – Prof. Manuel Livingston

Understanding the safe parameters of electromagnetic energy is an important factor in our modern world. In this display, participants will view basic principles and mathematical concepts used to quantify exposure to various factors that affect our everyday lives. Models will demonstrate the basic concepts of electromagnetic energy.

Math Murder Mysteries – Prof. Terence Brenner

Solve the mystery cases in the links below. Then, submit your answers to the Mystery box with your contact information (name, telephone number and ID). Winners will be announced within two weeks!!

1. http://www.hostos.cuny.edu/departments/math/mat15/First-Mystery-of-the-Week-Math-Day.pdf
2. http://www.hostos.cuny.edu/departments/math/mat15/Second-Mystery-of-the-Week-Math-Day.pdf
3. http://www.hostos.cuny.edu/departments/math/mat15/Fifth-Mystery-of-the-Week-Math-Day.pdf
4. http://www.hostos.cuny.edu/departments/math/mat15/Eight-Mystery-of-the-Week-Math-Day.pdf

BIOGRAPHICAL PROFILES

CLAUDE BRATHWAITE

Dr. Claude Brathwaite is currently the Executive Director for the New York City Louis Stokes Alliance for Minority Participation in Science, Technology, Engineering and Mathematics (LSAMP). Claude initially attended Hostos Community College and later received his BS in Chemistry from the City College of the City University of New York and his Ph.D. in Organic Chemistry from the Graduate Center of the City University of New York. He was a Chancellor's Fellow (City University of New York) and a NIH Postdoctoral Fellow (Weill Cornell Medical College-Division of Molecular Medicine). As the Executive Director of the LSAMP, he oversees the day-to-day operation of the NYC Louis Stokes Alliance program across the 18 member campuses of City University of New York. Claude also served as the Co-Director of the Black Studies Program at the City College and the Project Director of the City College Black Male Leadership and Mentoring Program. The Black Male Leadership and Mentoring Project (BMLMP) at the City College of New York, provides a support system during the critical stages of academic and career development.

TERENCE BRENNER

Prof. Brenner has been at Hostos Community College for over thirty years. He received his Ph.D. in Mathematics from Yeshiva University. His Ph.D. is in Applied Mathematics-Quantum Mechanics. He has published three papers dealing with Quantum Mechanics. Some of his other publications have been at the Community college mathematics level. For example, one paper has been about a very easy and quick way for finding the LCD. Another paper deals with proving one trigonometric identity different ways. Over the years, He has taught: Mat 10, 15, 20, 100, 130, 150, 160, 210, and 220. The last book that he has written (2017), co-authored with D. Maysonet, is the textbook that is currently being used in Mat 150. He has been the editor of the Hostos Community College Mathematics Journal, which comes out once a year. Since its beginning, he also has had at least one paper in each edition of the journal.

FELIX CARDONA

Felix Cardona, B.A., J.D., is currently the Assistant Dean of Academic Affairs of Hostos Community College. Previously, Dean Cardona served as chair and faculty of the Behavioral and Social Sciences Department of Hostos Community College. Dean Cardona's area of research is Public Policy and Constitutional Governance. Dean Cardona has been instrumental in the development of new agreements between Hostos and other CUNY Colleges, and diverse programs within Hostos, including the newly developed Food Studies Program

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DENISE CUMMINGS-CLAY

Dr. Denise Cummings-Clay serves as a tenure-track Assistant Professor in the Education Department, Teacher Education unit. Coming to Hostos with a Bachelor's degree in Social Science Education and a Master's degree in College Student Personnel Work from Indiana State University, and the Ph.D. in Adult and Higher Education from the University of Oklahoma, she has contributed to the Hostos Community College community since 2012 by engaging students in learning through Education courses taught while she served at Hostos as an Adjunct and Substitute Assistant Professor respectively. Dr. Cummings-Clay has background in the area of experiential learning, which has fostered the intellectual growth and Service Learning experiences of EDU 104 and EDU 113 Education students. Dr. Cummings-Clay has taught each of the Early Childhood Education courses offered at Hostos. She has writing intensive, hybrid, and asynchronous Hostos teaching certifications and experience. In 2015, she published a customized textbook for the Field Experience in Education course (EDU 113) at Hostos, which provided students with an added cutting-edge academic resource. Dr. Cummings-Clay is founding Chair of the New York City Montessori Charter School Board of Trustees and currently serves as Chair of the Board's Edu-

cation Committee. Prior to joining the Hostos faculty, Dr. Cummings-Clay served as Director of Adult Education for the South Bronx Overall Economic Development Corporation.

OLEN DIAS

Olen Dias is a Professor of Mathematics at the Mathematics Department and holds an M.A. and Ph.D. in Mathematics.

JAQUELINE DISANTO

Dr. Jacqueline M. DiSanto is an assistant professor and unit coordinator of the Early-Childhood Education program. She also serves as the co-director of the Hostos Learning Styles Academy, which shares techniques for identifying the best practices for reading, studying, and preparing assignments with students. She is the chair of the Peer Observation Improvement Network for Teaching committee and a member of the Scholarship of Teaching and Learning committee. She sits on the Board of Directors of the New York City Montessori Charter School in the South Bronx.

IBRAHIMA DOUKOURE

My name is Ibrahima Doukoure. I will graduate from Hostos in June 2019. My goal after Hostos is to pursuit a Bachelor degree in Electrical Engineering at City College. I am originally from Guinea, a small country in the west coast of Africa. I came to the US in 2009 with no intention of going back to school at first. However, while my admiration for Science and Technology changed my mind, my love for Mathematics helped through my courses. I am sure it would continue helping me in the future. I have been working with Title V as a peer leader for Chemistry at first and for Physics this semester; thanks to Mathematics. Because as you all know, how well you understand this subjects depends a lot on your understanding of Mathematics. My experience as a peer leader is really helping improve my ability to speak in public, to communicate my ideas, to listen with attention.

REGINALD DORCELY

Reginald Dorcely has been teaching in mathematics department and coordinating STEM research Activities since 2010. He has completed his undergraduate in Mathematical Sciences and Biology form Medgar Evers College and graduate studies in Mathematics Education from City College. Professor Dorcely has mentored Hostos students in linear algebra research. Under his supervision, students have learned how to reduce dimensionality of large data and determine prominent response variables. His research students have presented their work in regional and national scientific conferences. Also, Professor Dorcely has the privilege to conduct a study in the filed psychology education in collaboration with Dr. Lang from the Natural Sciences department. Professor Dorcely has co-authored a research paper, “Psychological Impact of Age on Learning” .

CLAUDE FERNÁNDEZ

Claude Fernandez is an Assistant Professor and Coordinator of the Business & Accounting unit. He has been teaching full time at Hostos since 2009 and recently published an article on improving learning outcomes for minority students in hybrid accounting courses. He is a licensed Certified Public Accountant in the state of New York, received an MBA in Finance from Columbia University and is a member of the American Institute of Certified Public Accountants. Professor Fernandez joined Hostos after an extensive career in financial management including service as the Chief Accounting Officer, and Chief Financial Officer of an international real estate investment organization. Professor Fernandez enjoys combining real world business experience with academic rigor in the classroom and views every class as an opportunity to help our students achieve their goals.

BARRY FORD

I am in my third semester at HCC; I hope to have enough credits to graduate by the end of this year. I plan to obtain at least a Bachelor’s Degree in mathematics; I hope to use my degree to teach or do corporate consulting. I love the way math can reveal hidden patterns in the world around us. I also love how, in math, seemingly unrelated problems can have surprising connections. For me, the study of mathematics is about finding those connections, simply for the pleasure of learning.

GAFFAR GAILAINI

Gaffar Gailani, PhD, is an associate professor of mechanical engineering technology at New York City College of

Technology in Brooklyn. He is also the director of the Center of Medical Devices and Additive Manufacturing at New York City College of Technology which is supported by NSF and NASA. He received his PhD from the Graduate Center of CUNY .

NANCY GENOVA

Ms. Genova has over twenty-four years of public administration experience as health care administrator. She holds a Master's in Public Administration with a concentration in Health Care Administration from Long Island University and a B.A. in Social Work and Fine Arts from Lehman College. Ms. Genova is currently full time faculty at Hostos Community College in the Behavioral & Social Sciences Department's Public Policy & Administration Unit. Prior to that she developed the Bronx CAPC Initiative a nationally recognized model of care where she served as the director of the program at the same hospital for their Women's HIV Services. She has been involved with women's programs and been in the field of HIV/AIDS since 1993. She is considered a social activist by her peers, and has been acknowledged in a report issued by the NYS AIDS Advisory Council "*Women In Peril HIV & AIDS The Rising Toll On Women of Color*". She currently serves as President of the board to 100 Hispanic Women and is on the planning committee of their yearly Mind, Body, Spirit conference. She was appointed to the Human Rights Commission of Rockland County in April 2008 by the then county Executive Scott Vanderhoof. The play that she authored "The Death of a Dream" had its off-Broadway debut in October 2009 at Roy Arias Theater and received numerous media coverage. The show was on college tour from 2010-12 throughout the United States.

ANDREW GREEN

Drew holds an MBA, an MA in Economics and a BA in Spanish Studies. He is currently working on a Ph.D in Economics at the CUNY Graduate Center, where his research is focused on financial system risk. Drew has taught classes in economics and statistics at Queens College, Baruch College and Yeshiva University. He joins the Hostos family as an appointed fellow for the fourth year of the QR program. As QR Fellow, Drew works interdepartmentally with Hostos faculty to develop tools for enhancing the quantitative reasoning skills of Hostos students across all fields of study.

BIAO JIANG

Prof. Jiang received his Ph.D in Electrical Engineering from The City College of New York (2013). He spent 5 years as an adjunct faculty member at City College of New York, Brooklyn College and Hostos Community College teaching both Graduate and Undergraduate level courses, then moved to Hostos Community College as an Assistant Professor in 2014. Prof. Jiang's current work focuses on computer vision and robotics.

TOUNKARA KABA

I'm Tounkara kaba from Senegal (West Africa). I'm a Hostos graduate and now pursuing my bachelor degree at City College majoring in International Studies. I am expected to graduate in 2019. I have been working as a peer leader for 3 years now and what I like about it is that it has improved my interpersonal skills and is preparing me for my future full time job. I came to this country in 2008 to pursue my education.

INZAMAMDEEN KASSIM

My name is Inzamamdeen Kassim, I am a Civil Engineering Major at Hostos Community College expected to graduate at the end of this Spring semester. I started HCC fall of 2016 after migrating from Guyana, where I previously studied Chemistry at the University of Guyana. When I started HCC I was a Math Tutor and this is my first semester as a Math Peer Leader. Being a member of these support programs on campus lead me to join the Student Government Association, where I am currently the Chair of the Senate and the Vice President of Academic Affairs. I am also an Ambassador for Hostos Student Leadership Academy and former president of Hostos Engineering Club.

MOISE KOFFI

Dr. Moise Koffi received his PhD in Mechanical Engineering from the CUNY- Graduate Center in 2013 and currently works as an Assistant Professor in the Mathematics Department of Hostos Community College. Professor Koffi is also the Director of the Proyecto Access Program at Hostos where he has overseen the STEP and CSTEP grants for over 10 years. Dr Koffi's research focusses on the fluid dynamics in the vicinity of rotationally oscillating surfaces and heat transfer applications. Other research interests in-

terests include STEM education for underrepresented students in secondary schools and higher education, and also the learning of the humanities by minorities.

SWIMI KOLANCHERIL

My name is Swimi Kolancheril and I am majoring in electrical engineering at Hostos Community college. After this semester and I'm planning to transfer to city college. I was always interested in math because of my dad and sister. Their love for math eventually became mine. I was born and brought up in India and moved here 3 years ago. Although it was little hard at first adjusting to a new environment, being at Hostos, I was surrounded by friends. My friends and the resources available to me aided in my transition. I'm the president for robotics club and also a student ambassador for Hostos Leadership Academy. I'm also a tutor for BMI Team and CSTEP .

ISABEL LI

Prof. Isabel Li holds a B.A., M.A., and a M.Phil. She is the Director of the Hostos Academic Learning Center (HALC) of the Office of Academic Affairs at Eugenio María de Hostos Community College. The mission of HALC is to support the academic success of all Hostos students and offer activities that serve to deepen student's academic experiences and complement instructional learning.

MANUEL LIVINGSTONE

Manuel Livingston, M.S.Ed., is an Assistant Professor in the Allied Health Division. He holds a Masters in Higher Education from Walden University. His specialty is formulating lesson plans using andragogic principles, and applying them in course work relevant to radiologic and health sciences. Professor Livingston has also worked on assessment planning and program accreditation. He has been on the faculty at Hostos since 2014.

ANN MESTER

Ann Mester is Associate Dean for Academic Affairs and is just completing her first year at Hostos. After completing her PhD Latin American anthropology and archaeology at the University of Illinois, she worked for ten years as a technical editor for a scientific association, then returned to academia where she worked as a dean in charge of curriculum development, general education, and programming for first-year students. Ann's work is informed by her commitment to education as a public good and her training as an anthropologist. Accordingly, much of her work has emphasized cultural literacy, international studies, and the development of critical thinking skills through courses that tackle real-world problems such as Environmental Sustainability and Social Justice, Global Public Health, and Deliberative Democracy and Social Action. Ann spent her undergraduate years at Fordham University back when the Bronx was burning and is thrilled to be back in the Bronx now, when our community is asserting its pride and burning brighter than ever.

LAUREN MILLIN-MOORE

Lauren Millin-Moore, Associate Director of ASAP at Hostos Community College, was born and raised in the Bronx. As a Bronx native, she always wanted to make a positive impact on her community, but felt stifled by her corporate career. Rather than stay in a career that she had outgrown, Mrs. Millin-Moore decided to take a leap of faith by accepting an offer to work as an Assistant Director at Mercy College's Bronx Campus. After a few years of working in higher education, Mrs. Millin-Moore soon realized that she finally discovered her life's passion – supporting students' academic pursuits through graduation. In her current role as Associate Director of ASAP, Mrs. Millin-Moore works closely with academic advisors on staff to create a dynamic experience for students, centered around high touch advisement and the provision of financial and personal supports, to help students graduate from Hostos Community College within three years. Mrs. Millin-Moore earned a Bachelor's degree in Business Administration from Fordham University and a Master of Social Work from Hunter College of the City University of New York.

TAMILEE PÉREZ

My name is Tamilee Perez. I graduated from HCC in December of 2015 with an associate in Business Management. I am currently attending to Baruch College pursuing a bachelor degree in Operations Management and will be graduating this spring on June 2018. I was born and raised in the Dominican Republic and came to this country 6 years ago. I love math because it is part of every aspect of my life. I have been a Peer Leader for over three years already and this position has helped me develop my public speaking

skills. Also it has helped me become more compassionate because I have learned how to put myself in other people's shoes. This position has benefited me on my career tremendously because everything is based on numbers and mathematical operations.

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. He is interested in such areas as 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 in various peer reviewed journals. Dr. Prince is also currently collaborating on projects that aim to expose community college students to mathematical research early in their academic careers. His other interests include traveling and cooking.

KATHLEEN RONCA

My name is Dr. Kathleen Ronca. I have been a nurse for over 30 years. I received a Bachelor of Science in Nursing from Lehman College of the City University of New York in 1986. I went on to receive a Master of Science in Nursing from Lehman College of the City University of New York in 1995. In 1995, I also received a Post Graduate Degree as a Pediatric Nurse Practitioner from Hunter College of the City University of New York. In 2003, I received a Post Graduate degree from the College of Mount Saint Vincent as an Adult Nurse Practitioner. I completed my education with a Doctorate in Nursing Practice with a concentration in Nursing Education from Fairleigh Dickinson University in 2014. I have taught at CUNY since 2010 and this is my sixth year at Hostos Community College. Mathematics is integral to the field of Nursing in that all medications are given using some form of measurement. Dosage calculation and conversion from the customary system into the metric system is used daily in nursing.

EDME SOHO

Dr. Soho is an assistant professor in the Mathematics Department. He is an applied mathematician with experience using and instructing others on the use of mathematical and computational modeling tools in multiple field. He enjoys collaborative, interdisciplinary research with professionals of diverse backgrounds. His primary research interests lie in mathematical modeling, dynamical systems, dynamics of infectious diseases, population dynamics, epidemiology and immunology.

KAREN M. STEINMAYER

Professor Steinmayer is an Assistant Professor of Psychology in the Department of Behavioral and Social Sciences at Hostos Community College in the Bronx, NY. She holds a doctoral degree in Environmental Psychology and Health Psychology from the Graduate Center of the City University of New York. Her research on the social construction of embodied experience examined the narratives, discourses and practices through which embodied gender is constructed, including the places in which these interactions occur, and their relation to health. She has been conducting research in collaboration with the Dental Hygiene Program to investigate and address issues regarding pain and ethnic health disparities related to immigration, using this approach. She brings this research experience to her teaching, emphasizing the examination of gender, ethnicity and immigration on embodied experience and health. Her most recent research examines people's constructions of Place Identity in the global, postmodern world.

DIONICIO TAVERAS

Dionicio Taveras was born in The Dominican Republic years, and moved to New York in 1994. He graduated with Bachelor in Civil Engineering, from University of Santo Domingo, and then received his Masters of Arts in mathematics from Lehman in New York. He is currently an adjunct faculty in the Mathematics Department at Hostos and in the Mathematics and Computer Science Department at Bronx Community College. His experience at Hostos extends back to 1997 and includes training and developing new mathematics tutors to facilitate CUNY COMPASS Mathematics Workshops, and tutoring mathematics in all levels. Prof. Taveras has also worked with the Department of Education of the City of New York as a Program Assistant Mentor, teaching junior high school students mathematics, logic, and statistics, and assisting students to solve mathematics problems in arithmetic skills and the rudiments of algebra. He also conducted one-on-one and small-group tutoring in all mathematics levels and Physics at the Santa Marta College, in Santo Domingo, Dominican Republic .

DIALLO THIERNO

My name is Thierno Diallo, I am from Guinea (Conakry). I came in the US 3 years ago. I am majoring in Mathematics and I will graduate in May 31, 2018. I was a senator of SGA from 2016-2017 and currently SGA president for the term 2017-2018. I am member of the honor program, leadership academy, PTK and 2016 fellow of the American Needs You fellow program. Recently, I was selected as finalist of the Jack Kent Cook scholarship. When I was a little boy, math was my passion but I went to medical school because my parents wanted me to be a doctor. When I came here, I was accepted at Hostos, so I decided to go for my passion. I like math because I like solving problems and I am very good with numbers .

ANTONIOS VARELAS

Antonios Varelas is Associate Professor of Psychology in the Behavioral and Social Sciences Department at Hostos Community College of the City University of New York. He earned a B.A. in Psychology from Baruch College, New York, and a Ph.D. in Learning Processes from The Graduate Center at the City University of New York. His current research interests explore the impact of concept-formation protocols and clicker technology on learning in the undergraduate classroom.

ELIZABETH WILSON

Elizabeth Wilson is the Director of School-College College Partnerships at Hostos Community College, working with College Now and the Early College Initiative. She has worked at Hostos since 2006 in bridge-to-college programs.

KATE WOLFE

Kate Wolfe is an Assistant Professor of Psychology in the Behavioral and Social Sciences Department at Hostos Community College, CUNY. Dr. Wolfe is a social psychologist with research interests in quantitative reasoning among urban community college students, common core standards as they impact college faculty, student perceptions of online learning, using iPads in teaching, and urban college student attitudes toward sexual minorities. She joined the planning committee for PRIME (Project for Relevant and Improved Mathematics Education), funded by the Teagle Foundation in 2015. She is the Principal Investigator for the ongoing *Hostos Online Learning Assessment* project that begin in Fall 2015. She is Co-Investigator, along with Prof. Sarah Hoiland, for *Assessing Quantitative Literacy and Quantitative Reasoning in Diverse, Urban Community Colleges*, a project which began at Hostos in Spring 2015. Her publications related to quantitative reasoning are "Hostos Online Learning Assessment: A Survey of Student Perceptions" published in the Hispanic Educational Technology Services Online Journal in Spring 2016 and "*Measuring Numeracy in a Community College Context: Assessing the Reliability of the Subjective Numeracy Scale*" co-written with Prof. Sarah Hoiland. She has been a Visiting Scholar at Teachers College, Columbia University as a fellow of the Metropolitan Colleges Institute for Teaching Improvement, a program that focused on the nature of a liberal education at urban colleges.

LAUREN WOLF

Dr. Lauren Wolf received her AA in mathematics form Ulster Community College and continued her education at the State University of New York at Albany where she received a BA, MA and PhD in mathematics. Professor Wolf has been teaching for 14 years and while working on her PhD taught for seven years in prisons across New York. Dr. Wolf is Assistant Professor at Hostos Community College, where she teaches all levels of mathematics and trains undergraduate students in research. Her primary research interest is mathematical modeling combined with social justice. Professor Wolf is also working on reentry education in the STEM fields and is the founder of STEM-ucate Initiative for Reentry.

RUILI YE

Prof. Ye holds a B.E. in Engineering Mechanics (formerly Mathematical Mechanics) from Tsinghua University and a Ph.D in Computer Science from the City University of New York. She has taught at Hostos for more than ten years. Her research interests include modal logic, logics of knowledge and belief, knowledge representation, logical foundations of computer science, as well as philosophy and education.

ASAP
ACCELERATED STUDY IN ASSOCIATE PROGRAMS

PROGRAM DESCRIPTION

ASAP is designed to help associate degree seeking students earn their degrees as quickly as possible, with a goal of graduating at least 50% of students within three years. Due to a variety of stressors and responsibilities, many students are not able to complete their associate degrees in a timely manner, if at all. ASAP helps to eliminate these stressors by providing students with the academic, social, and financial support they need to graduate with an associate degree in no more than three years. Key ASAP program features include required full time study, comprehensive and personalized advisement, career development services and a consolidated block schedule. Financial incentives include waivers of tuition and mandatory fees for financial aid-eligible students, textbook assistance, and unlimited Metrocards for all students.

ELIGIBILITY REQUIREMENTS

ASAP is offered at Hostos Community College to all majors, excluding Allied Health.

You may be eligible for ASAP if you answer YES to the following questions:

- Have you applied and been accepted to Hostos Community College?
- Are you eligible for New York City resident tuition or New York State resident tuition?
- Do you agree to enter into a full-time associate degree program in an ASAP-approved major?
- Are you fully skills proficient or have no more than two outstanding developmental course needs in reading, writing, and math based on CUNY Assessment Test scores?
- Have you completed the Free Application for Federal Student Aid (FAFSA) and the New York State Tuition Assistance Program (TAP) application ?
- If you are a continuing or transfer student, do you have no more than 15 college credits and a minimum GPA of 2.0?

CONTACT INFORMATION

Chrystal Joseph, ASAP Recruitment Specialist. Location: C-490

Phone: (718) 664-2646 Email address: Chjoseph@hostos.cuny.edu

UPCOMING EVENTS

Please contact Chrystal Joseph for details.

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