

**39th semi annual
Dr. Janet Liou Mark**



**HONORS &
UNDERGRADUATE
2023**


Research Scholars Poster Presentation

Wednesday, December 6


Poster Presentation
(Poster Judging)
10:00am - 4:00pm
Academic Complex Lobby

Thursday, December 7

Poster Presentation
(Award Ceremony)
12:45pm - 2:15pm
Amphitheater LG30



Organized by City Tech's
Honors Scholars program



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Provost & Vice President for
Academic Affairs

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Reneta D. Lansiquot

Director of the Honors Scholars Program

CUNY Research Scholars & Louis Stokes Alliances for Minority Participation

Hamidreza Norouzi

Director of Undergraduate Research

Diana Samaroo

Associate Director of Undergraduate Research

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Hamidreza Norouzi & Diana Samaroo

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Reneta D. Lansiquot

Founding Chair of the
Interdisciplinary Committee

Best Poster Awards

Amanda Almond

Assistant Director of the
Honors Scholars Program



HONORS



IN A REGULAR

COURSE

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Viktoria Dubrinskaya, Jessica Leppla,
& Ralph Lauren Ocampo
Prof. Subhendra Sarkar
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Aleēsha Hafeez
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Exploration of the Statistical Distribution

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Bridging Architecture and video games

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Using Communication to Correct Healthcare Inequity

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Reducing Carbon Emissions by using sustainable building materials

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Arduino Bluetooth Remote Control Car

Abraham Orell Moses
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[CET481I: Capstone Design Project](#)

3D Statically Determine Analysis of a Structure

Layla Taffurelli
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[CMCE 1115: Statics](#)

Biophilic Aspects of Japanese Architecture

Mohammad Mostafa
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Second Story House Extension

Aqil Ahmed
Prof. Cesar Salazar
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[Environmental Stewardship Service Learning Project: Volunteerism and Coping with Ecoanxiety](#)
Shennette Lewis & Raneem Mohamed
Prof. Amanda Almond

**CUNY RESEARCH
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PROGRAM (CRSP)
& LOUIS STOKES
ALLIANCES FOR
MINORITY
PARTICIPATION
(LSAMP)**

**Advancement of the Measurement
of the Indoor Environment in Building
Entrances**

Abdellah Gessra
Prof. Daeho Kang

**Does Abnormal Biometal Distribution
Cause Protein Misfolding Affecting
Neuronal Communication and
Neurodegeneration: Modeling and
Experimental Correlation**

Achlyn Genao
Prof. Subhendra Sarkar

Turntable Theaters in Entertainment

Amanda Padilla ❖
Prof. Leah Montesinos

**Polyethylene Glycol Diacrylate
Degradation Rate Studies**

Andy Moposita, Arda Taha Battaloglu,
Destiny Erhunmwunse, Israel Lang,
& Obinna Jeremy Duru
Prof. Ozlem Yasar

**Optimized Data Storage Algorithm
for IoT Based on Cloud Computing in
Distributed Systems**

Arian Berisha
Prof. Aparicio Carranza

How Can Technology Reverse Deafness

Ashanti Belone
Prof. Farrukh Zia

The Impact of AI on Healthcare

Farian Shahzad ❖
Prof. Muyessser Topcuoglu

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Radiologic Technology Program**

Fatima Kassim & Makadeer Kassim
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**Does Abnormal Biometal Distribution
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Jasper Cheung & Somdat Kissoon
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Lishelle Moore ❖
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Mohammed Jalloh
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Muhammad Jaffery ❖
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Ousmane Diallo
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Rebeca Philiias ❖
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Tyrone Hull
Prof. Damyanti Radheshwar

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Afroza Aktar
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Aleks Cili ❖, Alexis Torres ❖, Amir Zaman ❖,
Anissa Ramadini ❖, Jada Carlton ❖,
& Sandya Persaud ❖
Prof. Gerarda Shields & Navid Allaverdi

Exploring the Link: A Review of Obesity and Nonalcoholic Fatty Liver Disease

Amal Hizam, Janatul Barsha, Ju Young Park,
Mariam Otero, & Rosa Quinonez
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Ana Muy, Jose Ramon Marte Perez,
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Deep Learning-Based Detection of Breast Cancer Using Pathology Images

Anastasiya Sytina
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Prof. Daniel Gallego

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Prof. Jonas Reitz

Cultivating Economic Success: A Comprehensive Analysis of Migrant Training Programs in NYC and Their Economic Implications

Jack Hachicho
Prof. Patrick Slattery

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Jason Lin
Prof. Patrick Slattery

Exploring 19th Century Suspension Bridges

Jeremiah Reilly
Prof. Paul King

Structural Inequities, Climate Change, and Health Outcomes in Puerto Rico: A Case Study

Julie Lynch
Prof. Katherine Gregory

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The Processing Method Influence on the Properties of Heated-Activated Denture Base Resins

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Prof. Javiela Evangelista

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Prof. Akm S. Rahman

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Marian Cepeda
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Prof. Subhendra Sarkar

Developing Facial Recognition for Android Mobile

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Prof. Marcos Pinto

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Prof. Jieun Yang

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Ruyel Rodrigues
Prof. Lili Ma

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Prof. Juan Rivera-Correa

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Sasha Blenman
Prof. Annie Ngana Mundeke

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Silma Khan
Prof. Elizabeth Milonas

Predicting Forest Fires: An Integrated Approach Using Machine Learning and Environmental Data

Tanvir Rahman
Prof. Patrick Slattery



The Signs and Impacts of Climate Change

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Prof. Annie Ngana Mundeke

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Tiya Williams
Prof. Elizabeth Milonas

Energy Harvesting Sensors for Sustainable Air Quality Monitoring

Tomas Valentin
Prof. Li Geng

A Study on Enhanced Data Security Protocols in Cloud Computing

Valon Dellovci
Prof. Patrick Slattery

C2Smarter: Connected and Autonomous Mobility

Vladislav Molchanov *
Prof. Gerarda Shields

The Benefits of Simulated EHR Case Studies for Undergraduate Students

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Prof. Sitaji Gurung

Interdisciplinary Design Research: an AR Scavenger Hunt

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Prof. Genevieve Hitchings, Anne Leonhardt, & Jenna Spevak

NSF REU Grant # 2150432

Prof. Reginald Blake & Hamidreza Norouzi
& Ms. Julia Rivera

Enhancing Urban Climate Modeling through 3D Quantification of Greenspace using LiDAR and Generative AI

Ethan Peters
Prof. Reginald Blake, Hamid Norouzi
& F. Patricia Medina

A Supervised Machine Learning Approach for Determining Air Temperature in Global Urban Areas Using Satellite Land Surface Data


Taseen Islam, Audrey Lofthouse, Kip Nielsen
& Shaunak Sharma
Prof. Ashley Grey, Reginald Blake,
& Hamid Norouzi

Analyzing the Precursors to Tropical Cyclone Activity in the Caribbean and the Main Developing Region Under Climate Change

Sorbello Melendez & Giovanni Rosario
Prof. Keneshia Hibbert

Analysis of Dissolved Organic Content and Water-Color Trend in the Adirondacks Using Satellite Remote Sensing

Aisha Malik, Fahmeda Khanom, Touheda Khanom, Charles T. Driscoll, & Kevin C Rose
Prof. Marzi Azarderakhsh



INTER-
DISCIPLINARY
PROJECTS

Study of Micro Pollution in India

Yeshi Dolma, Jake Ortiz, Virginia Lima,
Aishwari Paul, Jai Shah, & Illana Vasquez
Prof. Brian Vant-Hull

**Weather Analysis and Visualization
for Everyone**

Charith Jayasekerage & Kestor Todd
Profs. Richard Rivera & Shakila Merchant

**The Eyes of Demi Darkreed: An
Accessible Application of Logic**

Daniel Hernandez
Profs. Tamrah D. Cunningham
& Reneta D. Lansiquot

**Beyond Syntax: Navigating SQL Queries
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Kimberly Ramgopal
Profs. Tamrah D. Cunningham
& Reneta D. Lansiquot

**Interdisciplinary Design Research:
an AR Scavenger Hunt**

Erickson Diaz, Alyssa Duran, Bryan Estevez,
Yiyi Zhong, & Cassidy Crespo
Profs. Genevieve Hitchings, Anne Leonhardt,
& Jenna Spevak

**Structural Inequities, Climate Change,
and Health Outcomes in Puerto Rico:
A Case Study**

Julie Lynch
Prof. Katherine Gregor

**Predicting Forest Fires: An Integrated
Approach Using Machine Learning and
Environmental Data**

Tanvir Rahman
Prof. Patrick Slattery

ENG 1773ID: Weird Science

Profs. Reneta D. Lansiquot
& Tamrah D. Cunningham

Artificial Intelligence: AI Apocalypse

Neil Duran, Kiara Martinez, & Sandya Persaud

Existence: Arms Evolution

Emmanuel Agyare-Poku, Jay Gurung,
Qixian Lin, Noelia Lazo, & Umar Mahmoo

Urban Farming: EcoGenetics

Scott Leung, Javier Bonilla Lopez, Julie Lynch,
& Yusuf Rahman

Virtual Identity: Crossroads

Jacqueline Palacios Aguilar, Divya Kaushal,
Skilyn Leon, Nieran Peterson,
& Jasmin De Santiago

PHYS 1002ID: An Introduction to the Physics of Natural Disasters

Prof. Abdou Bah

How will implementing 'Green Buildings' as the standard for newly and already built buildings help mitigate climate change?

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Huiracocha, Somdat Kissoon, Richard Rohoman,
& Shabik Sherchan

Hurricane Hilary

Carrillo Ernesto, Hernandez Mendez Brandon,
Hewitt Owen, Linden Steven, Melo Alex,
& Zhao Tianyi

Understanding Earthquake Preparedness and Resilience

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Rodriguez Stephanie, Rozario Matthew,
& Perkins Stephanie

Floods in Libya and their Link to Climate Change

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& Kuang Raymond

Honors Scholars Program
Student Academic Conference

Thriving and Surviving in Spaces Not Made for Us: Navigating Being “The First” in All That You Do



Thursday, December 7
9:00AM – 12:00PM
Academic Complex, A-105

“ I TRY TO BE THE PROFESSOR I NEVER HAD. It’s a whole different ballpark when you share that you’ve been where they are, that you understand their unique struggles and what they are going through, and you are here to help students every step of the way. ”

Dr. Catherine Ma

Professor of Psychology
Kingsborough Community College



Join Dr. Catherine Ma, the first Chinese full professor of psychology at Kingsborough Community College and the 2022 recipient of the Society of the Psychological Study of Social Issues (SPSSI) Two-Year College Teaching and Mentoring Excellence Award, as she speaks about her experience as an immigrant and first-generation college graduate.



RESEARCH

SCHOLARS

POSTER

PRESENTATION



39th semi-annual | Dr. Janet Liou-Mark

To all the dedicated professors for mentoring students. A heartfelt thank you for making this event a successful one.

Special thanks to:

Prof. Abdou Bah
Prof. Tamrah D. Cunningham
Mr. John Momeni
Ms. Chioma Okoye
Ms. Julia Rivera
Ms. Mary Zaradich

**A special thank you to the
dedicated poster judges:**

Muhammad Awal
Tamrah D. Cunningham
Susan Davide
Katherine Gregory
Nanette Johnson
Ivana Jovanovic
Eirini Melena Karoutsos
Lyubava Kroll
Joseph Luther Jeyaraj

Elizabeth Milonas
Annie Ngana Mundeke
Marcos Pinto
Nandi Prince
Lina Romasanta
Alba Rossi-George
Satyanand Singh
Khrystyna Vyprynyuk
Tracy Zimmermann



A special recognition & appreciation to
Ms. Or Szyflingier for designing the program.