

UNDERGRADUATE RESEARCH & CREATIVITY DAY

DECEMBER 12, 2024



ART & DESIGN PROJECTS

8:00 a.m. – 4:00 p.m.
Student Center Atrium

POSTER SESSION

11:30 a.m. – 1:00 p.m.
Multipurpose Room

CREATIVE PERFORMANCES & PROJECTS

2:00 p.m. – 4:00 p.m.
Lawrence Herbert School of Communication
Studio A



Thank you for joining us for the Fall 2024 Undergraduate Research Day at Hofstra University. Today we celebrate the hard work and dedication of students mentored by our committed faculty. The products are:

- posters of cutting-edge research in the Mack Student Center Multipurpose Room
- artistic Ceramics on display in the Mack Student Center Atrium, and
- presentations in dance, music, musical theatre, and film in Studio A of the Lawrence Herbert School of Communication.

Poster topics span the liberal arts and sciences, nursing, health sciences, communication, business, engineering, and computer sciences.

Artistic works are innovative ceramics.

The day's Creative Performances and Projects in LHSC Studio A include musical renditions by a Clarinet Ensemble and a String Trio. Other presentations include original films, a solo dance performance presented in film, and a Musical Theatre Minor Cabaret performance.

Congratulations to all the participants on their outstanding work!

Sincerely,

Elfreda V. Blue, Ph.D.
Vice Provost for Undergraduate Studies
Office of the Provost

PRESENTERS

Hofstra College of Liberal Arts and Sciences

School of Humanities, Fine and Performing Arts

Romance Languages & Literatures

Presenter: Samantha Espinal

Title: The Languages of Paraguay

Advisor: Vicente Lledo-Guillem

Presenter: Natalia G. Gechlik

Title: The Spanish Language in Contact with the Mayan Language Tzutujil

Advisor: Vicente Lledo-Guillem

School of Natural Science and Mathematics

Biology

Presenter: Grace Armet

Title: Effects of Programmed Intermittent Epidural Bolus (PIEB) Implementation on Critical Obstetric Outcomes

Advisor: Matthew Fisher

Presenters: Disha Bhalla, Kushmeet Kaur, and Gabriella Khaldarov

Title: Internal Subunits of The Exocyst Complex are Required for Allosteric Activation

Advisor: Luciana Santoferrara

Presenters: Aleyana Boothe, Rebecca Chase, Carissa Kissoon, Chloe Marchand, Kamila Safarova, and Renato Schoenfeld

Title: Global Change Microbiology: Eutrophication and Hypoxia in Relation to Microeukaryote Abundance and Diversity in Hempstead Harbor, NY

Advisor: Luciana Santoferrara

Presenter: Amedea Cipriano

Title: Microbial Eukaryotes as Indicators of Ecosystem Health in Long Island Sound

Advisor: Luciana Santoferrara

Presenter: Ashley Farrelly

Title: The Effect of Different Carbon Sources on the Biomass Utilization Capabilities of Co-cultures of *Clostridium clariflavum* and *Clostridium thermosuccinogenes*.

Advisor: Javier Izquierdo

Presenters: Yaswinder Kaur, Gianna Lombardi, Alisson Meer, Nicholas Socci, Kevin Tompkins, and Justin Zheng

Title: Global Change Microbiology: Prokaryote Diversity in the Context of Acidification and Deoxygenation

Advisor: Luciana Santoferrara

Presenter: Daniel Koulta

Title: Evaluation of Diazotrophic *Rhizobium* and *Sphingobium* Strains as Growth-Promoting Rhizobacteria for Wheat

Advisor: Javier Izquierdo

Presenter: Gianna Lombardi

Title: Studies on the Parasitic Isopod *Zonophryxus Probisowa* (Isopoda: Dajidae) From Collections of Shrimp Hosts Off the Coast of California

Advisor: Jason Williams

Presenter: Angelica McAlpin

Title: Co-cultures of *Sphingobium* sp. AEW4 and *Mucilaginibacter* sp. AK15 as Bioinoculants to Improve Wheat Growth

Advisor: Javier Izquierdo

Presenter: Prameet Shah

Title: Variation in GI Tract Dimensions Among Three Species of Box Turtles: Correlations with Diet

Advisor: Russell Burke

Presenter: Ugonna Udeh

Title: Akt Isoforms Regulate Glioblastoma Evasion of Apoptosis

Advisor: Michael Does

Presenter: Justin Zheng

Title: New Species of Ectoparasitic Isopods (Bopyridae) Associated with Deep-Sea Squat Lobsters from New Zealand

Advisor: Jason Williams

Chemistry

Presenter: Hannah LaVena

Title: DSI-GC-MS Analysis of Designer Cannabis Products

Advisors: Kevin Bisceglia and Ling Huang

Presenter: Marie Lemay

Title: Improving Presumptive Color Tests for Cannabis Products

Advisor: Ling Huang and Nanette Wachter

Presenter: Samantha Walter

Title: Analysis of Cannabinoids with Droplet Fluorescence Spectroscopy

Advisor: Ling Huang

Geology, Environment and Sustainability

Presenter: Allison Alberti

Title: Small Beings Vermicomposting Internship

Advisor: Sasha Pesci

Presenter: Francesca Grassia

Title: Looking for the Last Glacial Period: Foraminifera in the North Atlantic

Advisor: E. Christa Farmer

Presenter: Tea Grzanov

Title: Allergies in a Changing Climate

Advisor: Sasha Pesci

Presenter: Alexander Nathenson

Title: The Intersection of Jewish Values and Environmentalism

Advisor: Sasha Pesci

Presenter: Vonne Pohan

Title: What Deep-Sea Microfossils say About Climate: *N. pachyderma* Percentages

Reframe the Transition between Marine Isotope Stages 5a and 5b

Advisor: E. Christa Farmer

Presenter: Mohammed Rahman

Title: Citizens Campaign for the Environment (CEE) Internship

Advisor: Sasha Pesci

Mathematics

Presenter: Anoop Krishnadas

Title: Identifying Factors Influencing STEM Student Retention at Long Island Community Colleges

Advisor: Kira Adaricheva

Physics & Astronomy

Presenter: Martina Lim

Title: Fluorescence Study of mTFP, mWasabi, and Select Mutants Under Cryogenic Conditions

Advisor: Daniel Johnson

Psychology

Presenter: Sarah Shivsankar

Title: Phenotyping of NeuroDevelopment (PoND) Study

Advisor: Emma Condy

Peter S. Kalikow School of Government, Public Policy & International Affairs

Anthropology

Presenter: Sophia Camacho

Title: Cultivating Change: Hollenback Garden's Influence on Clinton Hill and the Community Garden Movement

Advisor: Sharryn Kasmir

Global Studies and Geography

Presenter: Justin Danek

Title: The Ethical and Legal Implications of GIS Technology in Political Redistricting

Advisor: Jaclyn Langella

Religion

Presenters: Abigail Anderson, Dylan Budhu, and Nicholas Lucchetto

Title: The Hofstra Religious Mapping Project

Advisors: Ann Burlein and Julie Byrne

Hofstra Northwell School of Nursing & Physician Assistant Studies

Nursing

Presenter: Victoria Chen

Title: Effect of Lifestyle Interventions on Gestational Diabetes Prevention: A Critical Analysis

Advisor: Tanyka Smith

School of Health Sciences

Allied Health and Kinesiology

Presenters: Emma Brennan, Erin Crisley, Anaya Davis, and Paige Kyle

Title: Mobility and Strength Profile for Division I Men's Basketball Players with Prior Lower Extremity Injury

Advisor: Katie Sell

Presenters: Admar Calovini, Tarek Harhash, Emily Kishori, Paige Kyle, David Wang, and Lily Yopez

Title: Comparison of Ankle Dorsiflexion Scores Between Division I Male and Female Collegiate Student Athletes

Advisor: Katie Sell

Presenter: Julia Catanzano and Stacey Wong

Title: Relationship Between Ankle Dorsiflexion and Landing Mechanics in Male and Female Division I Student-Athletes

Advisor: Katie Sell

Presenters: Erin Crisley, Jasmine Garmon, Ameila Heywood, and Jessie Hirsch

Title: Relationship Between Y-Balance Scores and Lower Extremity Mobility and Strength Measures in Division I Student-Athletes

Advisor: Katie Sell

Population Health

Presenter: Amelia Balchan

Title: Contemporary Trends in Firearm Related Deaths in the United States, 1999-2022

Advisor: Ibraheem Karaye

Presenter: Taylor Bryan

Title: Perspectives of Local Alzheimer's Community Educators

Advisor: Martine Hackett

Presenter: Megan Carroll

Title: Sex Differences in Opioid-Overdose Mortality Trends in the United States

Advisor: Ibraheem Karaye

Presenter: Sabira Mohamed

Title: Association Between Pre-Transplant Blood Transfusion and Acute Rejection, Graft Failure, and Mortality in Lung Transplant Recipients

Advisor: Ibraheem Karaye

Presenter: Rida Nasir

Title: Risk Factors for Non-Follow-Up with Community-Based Referrals in Patients with Social Determinants of Health

Advisor: Martine Hackett

Presenter: Emilia Rouse

Title: Cultural Influences and Attitudes Towards Chronic Diseases in Hispanic Americans

Advisor: Martine Hackett

Presenter: Sophia Scicutella

Title: Trends in Assault Mortality in the United States, 1999-2022

Advisor: Ibraheem Karaye

The Lawrence Herbert School of Communication

Journalism, Media Studies, and Public Relations

Presenter: Cyrah Joseph

Title: "Baddies" and Beyond: Exploring Authenticity and Impact

Advisor: Jingsi Christina Wu

Radio, Television, Film

Presenter: Andrew Garces

Title: Understanding Filipino Third World Cinema Against a Western National Identity

Advisor: Rodney Hill

Fred DeMatteis School of Engineering and Applied Sciences

Computer Science

Presenter: Mason Odani

Title: Analyzing Ideas Using Knowledge Graphs and Linguistic Methods

Advisor: Simona Doboli

Engineering

Presenters: Jodee Calder, Ryan Fagan, and Nihal Jacob

Title: Device to Enhance Cell Adhesion on a Vascular Graft

Advisor: Roche de Guzman

Presenters: Lauren Fisher and Dana Saporova

Title: Modeling, Testing, and Simulation of a Custom-Made 3D-Printed Back-Support Device

Advisor: Roche de Guzman

Presenter: Gianna Imeidopf

Title: Optimization of Plant-Derived Extracellular Matrix Structure and Mechanics for Vascular Repair

Advisor: Nick Merna

Presenter: Aidan Mathews

Title: Growth Factors for Induction of Intramuscular Ectopic Tissues

Advisor: Roche de Guzman

Presenter: Allison Meer

Title: Process for the Creation of Hair-Based Tissue Engineering Mesh

Advisor: Roche de Guzman

Presenter: Shannon O'Brien

Title: Utilizing Maker Space Resources to Create New Pedagogy for First Year Courses & Literature Review on Seatbelt Safety

Advisor: Lynn Albers

Presenters: Kaita Odani and Kyle Raymond

Title: The Effect of Freestream Turbulence Level on the Drag & Lift Coefficients of Rotating Baseballs and Spheres

Advisors: David Rooney and John C. Vaccaro

Presenter: Krishan Rathee

Title: Digitizing Small-Scale Models

Advisor: Edward M. Segal

Presenter: Raymond Spinelli

Title: CLCPA, NYSEDA, Walden and Hofstra: Getting to Net-Zero One Building at a Time

Advisor: Lynn Albers and Joseph M. Heaney III (Walden Environmental Engineering)

Presenter: Caleb Williams-Anderson

Title: Sunlight Driven Transformation of the Pesticide Isoxaben

Advisor: Minjeong Suh

Frank G. Zarb School of Business

Marketing, International Business & Legal Studies

Presenter: Lilliana Ayres, Jordan Jenkins, Domenico Laucella, Anthony Sakis, John Tucci, Arianna Vitale, and Alexa Zuniga

Title: What Fast Food Variables Effect Fast Food Consumption & Perception

Advisor: Boonghee Yoo

Presenter: Elizabeth Chester

Title: Exploring the SEO Impact on Crumbl Cookies' Digital Success

Advisor: Li Huang

Presenters: Alia Figuerdo, Maxine Gilder, Nicholas Joy, Ellie Katz, Elena Lawrence, Arianna LeGoff, and Bridget Urban

Title: Beyond The Feed: Decoding Purchase Intent on Social Platforms

Advisor: Boonghee Yoo

Interdisciplinary Project

Romance Languages and Literatures and Latin American and Caribbean Studies

Presenter: Brooklyn Peterson

Title: Las pinturas de castas: Pintando un cuadro de los efectos del colonialismo

Advisor: Benita Sampedro Vizcaya

Independent Research Projects

Presenter: Amber Sun

Title: Australian Bat Lyssavirus Anterograde Transmission Following Therapeutic Monoclonal Antibody Treatment

Research in association with the Uniformed Services University in the Department of Microbiology and Immunology

Hofstra Advisor: Jessica Santangelo

Uniformed Services University Advisor: Dr. Brian Schaefer

Presenter: Alex Vasile

Title: Predicting T Cell Abundance and Spatial Distribution in Non-Small Cell Lung Cancer from Histopathology Images

Research in association with the National Cancer Institute, National Institutes of Health in Artificial Intelligence Resource, Molecular Imaging Branch

Hofstra Advisor: Jessica Santangelo

National Cancer Institute Advisors: Dr. Sushant Patkar, Dr. Baris Turkbey, and Dr. Stephanie Harmon

Student Art & Design Displays

8:00 a.m. – 4:00 p.m.

Sondra and David S. Mack Student Center Atrium

Fine Arts, Design, and Art History

Artist: Sophie Bourgeois

Piece: Ceramic Backpack

Advisor: Justine Stokes

Artist: Naomi Kaufman

Piece: Tattoo

Advisor: Amber Sibley

Artist: Sophie Bourgeois

Piece: Ceramic Dragon

Advisor: Justine Stokes

Artist: Courtney White

Piece: Lurker Man

Advisor: Amber Sibley

Artist: Sophie Bourgeois

Piece: Ceramic Vase with Frog

Advisor: Justine Stokes

Artist: Michael Zavatsky

Piece: Hard Candy

Advisor: Linda Casbon

Artist: Kathleen Hartonchik

Piece: Fish Jug

Advisor: Linda Casbon

Artist: Michael Zavatsky

Piece: Delft 127

Advisor: Linda Casbon

Artist: Kathleen Hartonchik

Piece: Set of Bowl, Plate, and Cup

Advisor: Linda Casbon

Creative Performances and Projects

December 12, 2024

2:00 p.m.

LHSC Studio A

Opening Remarks

Charles G. Riordan, Provost and Senior Vice President for Academic Affairs

Clarinet Ensemble

“Shepherd’s Hey” Percy Grainger (1882-1961) arr. Matt Johnston

Musicians

Lina Bohman	Oscar Munguia
Erick Cisneros	Scott Serafin
Heather Cuevas	Danielle Shokrian
Mikhaela Freitor	Heather Sims
Joseph Maiello	Miriam Stasinski
Mia McPartling	Dorian Vaughn

Director: Professor Laurie Friedman-Adler

Dance

“Dimensionality”

Performed by: Abdul Sanz

Choreographer: Abdul Sanz

Advisor: Rachel List

String Trio

String Trio in G-Major, Op. 9 No. 1 I. Adagio/Allegro con Brio

By Ludwig van Beethoven (1770-1827)

Musicians

Jarred Mercado, violin
Josue Mendives, viola
Moirá Barta, cello

Director: Dr. Alexander Sharpe

Film Studies

Senior Thesis Film

Title: "In a Sea of Eight Million"

Directed by: Jaden Moffitt

Advisor: William Jennings

Musical Theatre Minor Cabaret

"I'd Rather Be Me" from *Mean Girls*

Music/Lyrics: Jeff Richmond

Performed by: Morgan Sapienza

Accompanist: Kerry Prep, Adjunct Professor

"River"

Music/Lyrics: Joni Mitchell

Performed by: Grace Ward

Accompanist: Kerry Prep, Adjunct Professor

"Let Me Be Your Star" from *Smash*

Music/Lyrics: Mark Shaiman & Scott Wittman

Performed by: Isabela Valente and Dana Diiorio

Accompanist: Kerry Prep, Adjunct Professor

"Love Will Come and Find Me Again" from *Bandstand*

Music/Lyrics: Richard Oberacker

Performed by: Emily Renison

Accompanist: Kerry Prep, Adjunct Professor

Film Studies

Senior Thesis Film

Title: "Me and You"

Directed by: Iman Chanchi

Advisor: William Jennings

Closing Remarks

Justin Danek, Academic Affairs Chairperson, Student Government Association

