

# 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



HOFSTRA UNIVERSITY®

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 Santoferara*

**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 Santoferara*

**Presenter: Amedea Cipriano**

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

Advisor: *Luciana Santoferara*

**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 Dores*

**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: Tanya 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 Yepez**

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 Saparova**

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, NYSERDA, 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: Lillian 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 Figueredo, 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: Sophie Bourgeois**  
Piece: Ceramic Dragon  
*Advisor: Justine Stokes*

**Artist: Sophie Bourgeois**  
Piece: Ceramic Vase with Frog  
*Advisor: Justine Stokes*

**Artist: Kathleen Hartonchik**  
Piece: Fish Jug  
*Advisor: Linda Casbon*

**Artist: Kathleen Hartonchik**  
Piece: Set of Bowl, Plate, and Cup  
*Advisor: Linda Casbon*

**Artist: Naomi Kaufman**  
Piece: Tattoo  
*Advisor: Amber Sibley*

**Artist: Courtney White**  
Piece: Lurker Man  
*Advisor: Amber Sibley*

**Artist: Michael Zavatsky**  
Piece: Hard Candy  
*Advisor: Linda Casbon*

**Artist: Michael Zavatsky**  
Piece: Delft 127  
*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 Grainer (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

Moira 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

