



**2022 Faculty Research Day
11th Annual Outcomes Report
*Executive Summary***

April 1, 2022 marked the eleventh Faculty Research Day (FRD) since its inauguration in 2011. It was the first big live event since the pandemic had started, and the building-maximum of 250 people had registered. Although, the final attendance was about 284 people which included walk-in visitors and Zoom participants. Of the registered participants, 174 were UB Faculty/Students/Staff and 110 were non-UB guests (e.g. Goodwin University faculty/staff and high school students with their teachers, and other guests). This year there were 31 UB Poster Advisors from all three colleges -71% from the College of Engineering, Business and Education, 6 % from the College of Health Sciences, and 23% from the College of Science and Society.

A total of 118 research projects were presented by UB faculty and students, as well as Goodwin University (GU) faculty and five are high schools representing a diversity of academic disciplines. Posters are on display on UB's FRD [webpage](#) and at [UB ScholarWorks](#).

Among the 55 high school students attending, 34 students presented posters. UB welcomed Amity High School Juniors, Bridgeport Regional Vocational Aquaculture School Seniors, Fairchild Wheeler Magnet High School - Aerospace Engineering Campus - Sophomores, and Fairfield Warde High School and Staples High School Juniors.

Faculty Research Day is a competition as well as a display of research conducted by faculty and students. UB and GU faculty have the option to compete or submit posters in the non-competitive category. This year, the four faculty competitive posters were judged by colleagues from Columbia University (New York), Sacred Heart University (Connecticut), and Samford University (Alabama).

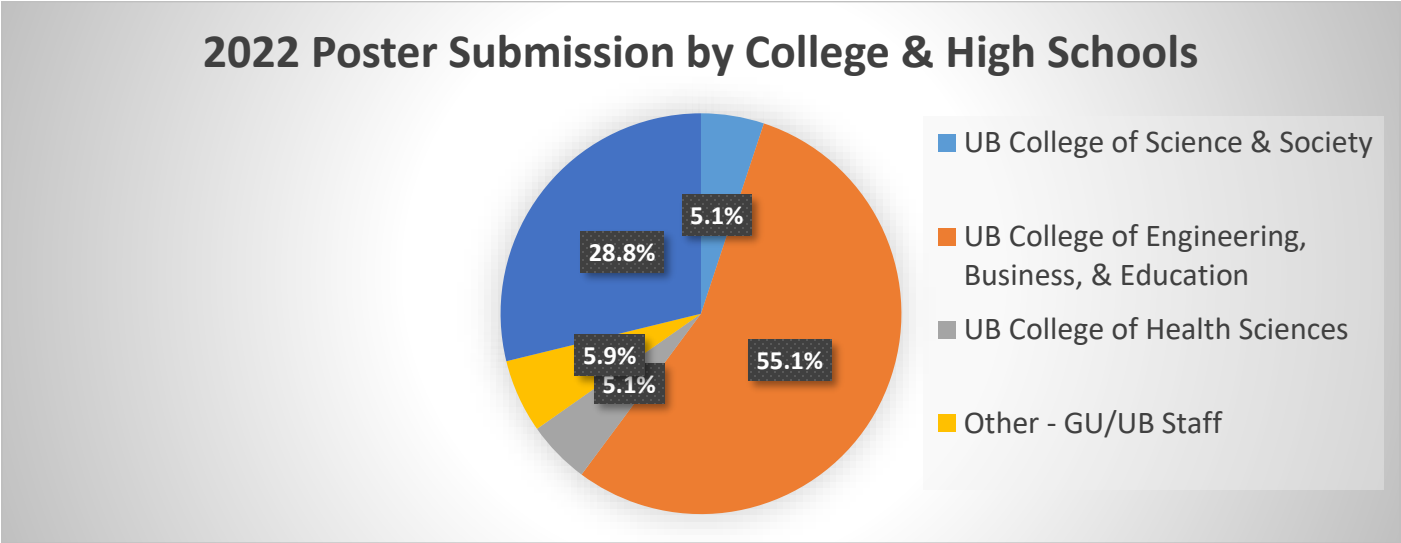
Sixteen UB and GU faculty judged the masters and doctoral student posters; nine UB doctoral students and seventeen UB alumni judged the undergraduate and high school posters. All doctoral, masters, undergraduate, and high school students were judged to determine first, second, third, and honorable mention honors for each level.

Social media outreach on UB's NEWS, Facebook and LinkedIn (#UBFRD) was intensified in the weeks leading up to the event on April 1st.

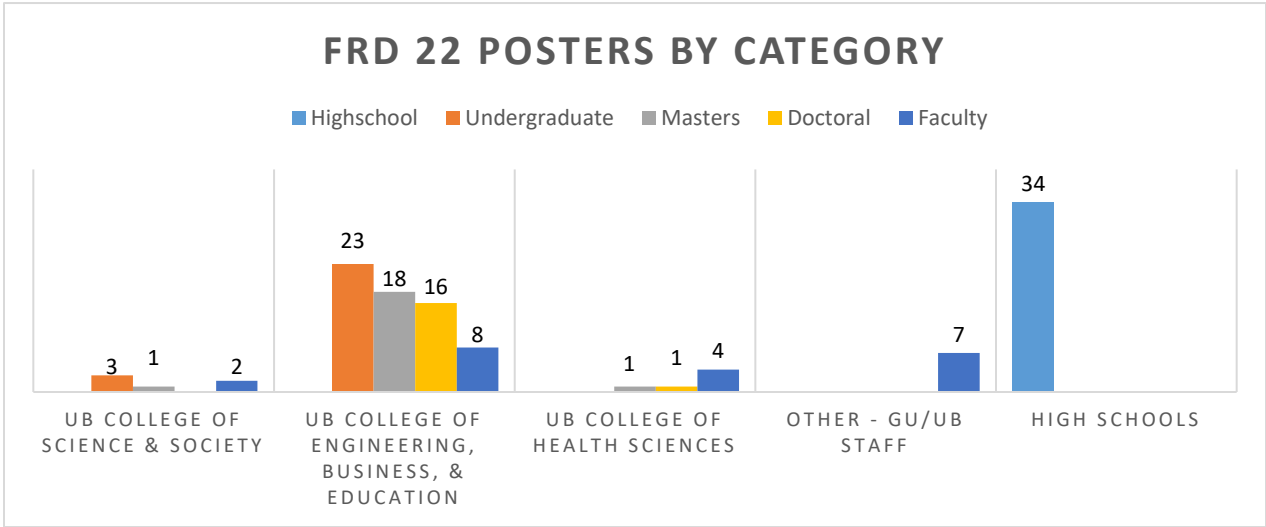
- UB's Facebook posts were made on January 10th, February 16th and 25th, March 9th and 25th, April 1st and 4th with a total of 111 Likes, 9 Comments, and 9 Shares.
- UB's LinkedIn posts were made on March 1st and 23rd, and April 1st with a total of 218 Likes, 13 Comments, and 8 Shares.
- On March 9th, an article by Eric D. Lehman and Julie Demers was featured "[UB Faculty Research Day - A Tradition Continues and Evolves](#)". On April 15th, an article by Mr. Lehman posted on "[Faculty Research Day Returns to Great Acclaim](#)".
- On April 1st, the day's live stream event on UB's FRD webpage had 57 views.

Dean Khaled Elleithy, PhD., Chair, 2022 FRD Committee
Julie Flores Demers, CRA, Co-Chair, 2022 FRD Committee

This year’s total 118 posters are sourced as follows: 65 (55.1%) from the College of Engineering, Business, and Education; 6 (5.1%) each from the College of Science and Society and from the College of Health Sciences; 7 (5.9%) from Goodwin University faculty and UB staff and 34 (28.8%) from area high schools. The distribution of submissions by college and high schools is presented in the chart below.



The distribution of poster submission by category reveals Undergraduate students as the majority participant category, with 26 (22%) of the posters, followed by 20 (17%) Master’s posters, 17 (14%) Doctoral posters. There were 34 (29%) High School posters and 21 (18%) Faculty posters (17 were non-competitive and 4 were competitive). See chart below.



Welcoming Remarks

Faculty Research Day began in the **Social Room** with Dr. Khaled Elleithy, Dean of the College of Engineering, Business, and Education, welcoming the 250+ attendees who registered. 2019 was the last time UB hosted a live faculty research day. It had been canceled in 2020 during the first wave of COVID and had been fully online in 2021. “We are extremely happy to welcome everyone in person to our first big event since the pandemic,” Dr. Elleithy remarked. “It is a trademark of our university.” Dr. Elleithy referenced the 1000 attempts that inventor Thomas Edison took to get the lightbulb to work, hoping that the researchers in the room would not have quite so much trouble. Dean Elleithy continued by saying that this day was part of the career-focused mission of the university, “developing a world-class workforce that is essential to the continued growth of industries and communities in Bridgeport, Connecticut, the United States, and the world.”

Provost Manyul Im and President Danielle Wilken spoke about the way that knowledge builds on itself. “Sharing what you learned with the rest of the world is scholarship at its best,” President Wilken said. “We will leave here better, more knowledgeable, and stronger.”



Pictured above left to right: Provost Manyul Im, PhD and UB President Danielle Wilken, EdD addressing the audience.

Morning Poster Judging Session

Students, faculty, and guests bustled around the Student Center’s **Great Room** (which showcased 80 posters from the College of Engineering, Business and Education) and **Wisteria Room** (which displayed 38 posters from the Colleges of Health Sciences, Science and Society and Goodwin University) to preview the posters and question the researchers. Within the two rooms, 34 high school students’ posters were displayed. Posters ranged in topic from “The Impact of Blockchain and Algorithm on Financial Technology” to a recipe for “Smart Doorknob Cleanser.” It was not all science and business.

Prof. Randy Laist’s poster focused on zombie fiction’s effects of political discourse. As fascinated students and faculty gathered around, Dr. Laist said, “Imaginative literature gives us a window into the future. Literature and film are always at the cusp of human evolution.”



Left Picture: Patricia Mulcahy-Ernt, UB’s School of Education Director speaking with Dean Elleithy in the Great Room.

Center Picture: Poster displays in the Wisteria Room.

Right Picture: Dr. Randy Laist presenting to Dean Kitty Engelman of the College of Science and Society and a student.

Some College of Health Sciences posters included five posters from the School of Chiropractic on topics as “Effects of omega-3 fatty acid supplementation on whole blood fatty acid levels” by Dr. Cheryl Lyon and “Pilot study assessing the effect of Fascial Manipulation on fascial densifications and associated pain” by Dr. Emmett Hughes - both of whom are UB Alumni who received their Doctorate in Naturopathic Medicine and Chiropractic in 2007 and 1997 respectively. Representing the College of Science and Society were posters from Math, Biology and Chemistry with titles like, “Evolution of Asteroid Orbits in a Restricted Three-Body Simulation,” by Anders Hannes Nilsson; or, “Ascorbic Acid Determination in Chinese Hamster Ovary Cells Exposed to Nickel and Chromium,” by Matthew Jagdeo; and “Novel Therapeutic Inhibitors Having Sugar Moiety Targeting HER2/EGFR as Anticancer Agent,” by Aleksia Shena, Juhi Solanki, and Gardison Jean.

Finally, six faculty posters from Goodwin University were displayed in the Wisteria Room. For example, Lisa Fanelli, Director of the Health Science Program, displayed “*Instructing Clinical Educators in Universal Design for Learning (UDL): A Pilot Study*”. Kimberly Reese, Associate Professor of Science, presented “*A Gender Comparison Mixed-Methods Study: Creating Veteran-Inclusive Campuses*”. And, Paul Danse, from the School of Nursing and Health Professions spoke about “*Machine learning models that can identify misclassified adverse reactions within the FDA’s medical device safety surveillance database.*”



Left Picture: Lisa Fanelli and Karrie Morin GU’s Director, Center for Teaching Excellence, with UB President Danielle Wilken, EdD.

Center Picture: Dean of the College of Health Sciences Michael Ciolfi; Dr. Emmett Hughes, School of Chiropractic; and Dean Khaled Elleithy.

Right Picture: Dr. Joanna Badara, School of Education with Dr. Ahmed El-Sayed, School of Engineering.

Morning Keynote Speaker

Dr. Chong Qiu, Associate Professor and Buckman Endorsed Professor, Department of Chemistry and Chemical Bioengineering at the University of New Haven took the stage in the Social Room. The presentation was titled, “*What is up in the Air: Potential Impacts of Trace Ambient Components on Environment and Climate.*” “My whole topic is what we breathe in and out,” said Dr. Qiu. “What trace elements are in the air that we don’t need, like ozone and ammonia.” Dr. Qiu demonstrated how ozone levels exceeded the standards in Connecticut, on many days of the year. There are different methods to monitor these elements, from the very expensive to the slightly cheaper, without losing quality.

Thanks to the School of Engineering’s Dr. Jani Macari Pallis’ recommendation, UB was able to invite with Dr. Qiu at short notice.

“One of best things about FRD is the conversation that starts to happen between disciplines,” said Dean of the College of Science and Society, Dr. Kathleen Engelman. “Our keynote speaker captured that in his presentation and our students have shown their disciplinary and cross-disciplinary work.”

Dr. Chong “Q” Qiu earned a BS in Chemistry at Tsinghua University (Beijing, China) in 2007. At Texas A&M University, College Station Dr. Q focused on the transformation of ambient aerosol by heterogeneous chemical processes and completed the PhD in 2013. Dr. Q moved to the University of North Alabama to serve as an Assistant Professor of Chemistry. In 2016, Dr. Q joined Tagliatone College of Engineering at University of New Haven and was promoted to Associate Professor in 2020. Dr. Q was the recipient of a National Science Foundation Faculty Early CAREER award and holds the Buckman Endowed Professorship at UNH since 2019.



Dr. Q's research focuses on atmospheric chemistry and aerosol microphysics using interdisciplinary approaches of laboratory experiments, instrumentation, field measurements and theoretical simulations. In particular, Dr. Q is interested in the role of amines in the atmospheric processes and novel approaches for air quality monitoring. Dr. Q's research program invites students with diverse backgrounds in math, physics, chemistry, environmental science, and engineering. Dr. Q is also actively looking for collaborative, interdisciplinary research projects with faculty, students and entities within our communities.

Lunch – Student Entrepreneur Center Showcase

FRD attendees enjoyed a catered lunch and were able to converse with Student Entrepreneur Center (SEC) students who displayed their businesses. Thea Marx, Doctoral Candidate, Naturopathic Medicine, displayed an innovative pre- and post-surgical supplement line. Enolda Joseph, a graduate student in the School of Business displayed a vegan skincare line, and Nicholette Goodin, a graduate student in the School of Education displayed a skincare and candle line. Attendees voted on the business they would invest in and the winner – Enolda Joseph's EL Skincare Brand – was announced later that afternoon.



Left Picture: Enolda Joseph's EL Skincare Brand display.

Center Picture: SEC student entrepreneurs and their businesses launched over the years were showcased.

Right Picture: UB's Library Services displayed some of its holdings of books published by UB Faculty notables – like Eric D. Lehman, poet Amy Nawrocki of the English Department, and editors Khaled Elleithy, Ausif Mahmood and chapter author Barkana Buket from the School of Engineering.

Meanwhile, UB's Admissions Office hosted high school students and teachers for lunch at Marina Hall and then escorted the students around campus to tour Dana Hall's Collaborative Biomedical Research Center and the School of Engineering's Wireless Mobile Communication Laboratory, Signal Processing Lab, Controls & Automation and 3-D Printing Lab.

Oral Presentations

Drs. Maria Gherasimova, along with Joanna Badara, moderated the afternoon oral presentations where select students and faculty from various disciplines provided compelling oral presentations on a variety of research topics.

The afternoon's program began with a presentation from **Director of Grants, Maria Gomes** on "*The Search for Grants: Facilitating the Identification, Pursuit and Stewardship of Grant Funding*". UB's Grants Office partners with members of the UB community in the pursuit and administration of grant funding that supports the institution's mission, strategic priorities, students, research, programming, etc. The Office works to identify funding opportunities, review eligibility and other requirements, assist in proposal and budget development, and secure institutional review and approvals through to submission. With regards to grant awards, the Office negotiates grant acceptance, facilitates a smooth transition to grants management (which includes grants accounting), and provides continual oversight for compliance and reporting requirements through grant closeout. UB's Grants Office also works closely with GU's Grants Department to promote the overall growth of both institutions and enhance our standing in the broader community.

Following Gomes' talk, the next presenters shared two examples of federal grants currently being overseen by the Grants Office.

Professor **Liane Leedom, MD**, spoke about *“RP! Radically Prepared! A Program to Develop a Skillful, Resilient, Professional Counselor Workforce for Southern Connecticut, Health Resources & Services Administration”*. The grant authors also included Allison Buller, PhD who Chairs the Counseling Program and Fredrick Dombrowski, PhD who Chairs the Social Science Department.

This 4-year grant totaling \$ 1.5 million supports an innovative initiative that will increase the supply of highly qualified behavioral health professionals in the Southern Connecticut cities: Bridgeport, Waterbury, New Haven, and West Haven— all designated Health Professional Shortage Areas. RP! will supply this target region with clinical mental health counselors trained to deliver trauma-informed, evidence-based therapies. The overarching goal of this project is to increase Connecticut's behavioral health workforce by training resilient, skilled clinical mental health counselors from underrepresented groups who are bilingual and culturally competent. Major trauma-informed evidence based, therapy training components will include Motivational Interviewing, Dialectical Behavioral Therapy Skills.

Hannah Halloran, MSW, presented on the Department of Justice's Office of Violence Against Women grant – *“UB Safer Campus”*. UB received a 3-year grant award in the amount of \$300,000 to implement a comprehensive approach to providing domestic violence, dating violence, sexual assault and stalking (DVDVSAS) education to reduce incidences, protect victims, raise awareness among all campus stakeholders, and create a seamless coordinated university-community effort to effectively address DVDVSAS.



Pictured above left to right: Maria Gomes, Liane Leedom, and Hannah Halloran were featured at the beginning of FRD's afternoon of oral presentations.

The second part of the oral presentations was moderated by UB's Director of the Bauer Hall Innovation Center, **Sherri Dente, Esq.** Dente highlighted Student Entrepreneur Center (SEC) students' successes of three students who had recently received funding for their businesses. **Clovvia McIntosh**, who graduated UB in 2007 and returned to enroll in the MBA program, presented TuBee, designed to prevent children from falling in bathtubs. McIntosh found out that an astonishing 120 children were sent to the ER daily and realized there was a need for protection, which then led to McIntosh creating a prototype that is in production. MBA student **Necas Collins** created two companies, BLACC Bottle and MooLA Investment Group. "It's whether or not you show up and tap into the resources UB offers," Collins spoke directly to the assembled high school students. "Tap in and leverage the resources that are available."

Finally, **Judy Apicella** took the stage. Now a graduate student in the Nutrition Institute, Apicella spent 13 years as an herbalist before attending UB. When Apicella's husband contracted Lyme disease and suffered from severe pain and brain fog – the research began. Apicella made an herbal mixture to help improve Nico's symptoms. Over the next few years, that remedy helped 65 more people. Additionally, Apicella helped a number of dogs who suffered from Lyme, including Apicella's own dog, by making an herbal remedy into a tea.

UB helped take the product to the next level. “When I started in the Nutrition program, I learned about things like metabolic pathways, and how to get my remedy lab-tested,” according to Apicella. After several submissions to UB’s Institutional Review Board and local testing labs, the next step was to seek FDA approval and refocused the research objective to work on a preliminary analysis of the formula. Apicella received help throughout this long process from Grant and Project Support Coordinator Julie Demers, from Dr. Stephen Jackowicz in the College of Health Sciences, and from Elena Cahill and Sherri Dente in the Entrepreneur Center. “You don’t even need a complete idea or product, like I had. The support between the students and the staff is amazing because they help you refine your ideas.” As a result of these efforts, Apicella received a 2021 CT Next Innovation Grant. Some of the funds were used by UB’s chemistry lab, under Dr. Abu Hossion’s guidance to conduct high-performance liquid chromatography analysis of the product.

Entrepreneur Center mentor Mike Roer (and owner of Academy Books & Records shop) helped by selling the product at the downtown Bridgeport shop. “Every dream is coming true. We’ll probably be doing a clinical trial by the end of the year,” Apicella hopes. Not content with this one product, Apicella’s next product to be tested will be an herbal remedy for skin conditions that is pioneered at the alpaca sanctuary, Bella Alpacas.



Pictured above left to right: Clovie McIntosh, Necas Collins, and Judy Apicella sharing their experiences and successes as a SEC entrepreneur.

From the School of Education, **Michael Pompano** - currently an ABD EdD with dissertation defense planned for later in April - spoke about “*Developing and Validating a Teacher Self-Efficacy Scale for Teachers of Students with Visual Impairments*”. The purpose of this research was to develop and validate an instrument to measure teacher self-efficacy for teachers of students with visual impairments (TSVIs). The mixed methods research resulted in the development of The Teacher Self-efficacy for Teachers of Students with Visual Impairments Scale (TSE-TSVI). Pompano used a six-step process for survey development and validation, which included 1) literature review; 2) a preliminary qualitative study; 3) synthesis of literature and qualitative data; 4) development of instrument items; 5) expert review using Lawshe’s procedure (1975) for item reduction and retention; and 6) and cognitive pre-testing. After scale development was completed, the instrument was piloted with a sample of TSVIs and data were analyzed for validity and reliability using Exploratory Factor Analysis, Cronbach’s alpha, and split-half reliability.

Finally, a Mechanical Engineering undergraduate **Nhat Pham** presented “*Parametric Design Optimization of a Light and Strong Quadcopter Frame*”. Small-scale drones have seen increased usage around the world for a lot of applications ranging from civilian, commercial, and military. They can be used for a lot of purposes such as light show, photograph, video recording, small package delivery, or reconnaissance. The technological advancement of the aerospace industry and manufacturing had helped created better drones every day. Within the drone itself, the frame is the most important structural component, and the quadcopter frame design is the most popular choice for all applications. One of the biggest challenges in designing the frame would be durability because the frame has to handle the most load. The project’s goal is to find a different methodology to optimize the durability of the frame that can withstand transient and failure operating cases, resistance to a crash with full load at a certain height and have a lightweight design. The project focused on optimizing the parametric structure of the frame to achieve structural integrity and optimal weight reduction. Variants of the 3D modeled drone frame was created with Creo and tested with FEA-based static structure analyses through SOLIDWORK Simulation. The optimization frames will be 3D printed and tested with a drop from a controlled height. In addition to the presenter, Nhat Pham, the senior design mechanical engineering team included Christian DeJarnette, Derek Cerulli and James Zakhour. They were advised by Professor and Chair of Mechanical Engineering Dr. Junling (Joyce) Hu.



Pictured above left to right: Michael Pompano and Nhat “Mark” Pham addressing FRD attendees in the Social Room.

Before the announcement of the poster winners, Julie Demers took the stage. As FRD’s Co-Chair, the success of the event had been mostly due to Demers’ hard work, but instead of taking a bow, she humbly announced raffle prize winners. According to Demers, “The six months of event planning - by the FRD committee, as well as all the FRD volunteers pitching in to help in the days leading up to the event - is what made the day a tremendous success.”

The selection of interesting prizes were donated from our generous partners. There was coffee from [Café AsoProLa Altamira](#). (Since 2017, UB students and faculty have been working on an economic development project with Costa Rican coffee farmers.); alpaca socks and herbal remedies from [Bella Alpacas and Home Harvested Herbs](#); UB swag bags from the Admissions Office and the [UB Clinics](#); and a sleek insulated stainless steel water bottle from [BLACC Bottle](#). The grand prize was an International Basket of treats donated by the FRD Committee - members included faculty and staff from Egypt, Romania, Canada, Guam, the Philippines and the U.S - to remind the audience to come back later that evening to enjoy the 44th Annual International Festival which celebrates the various cultures and talents of UB. Each year the festival has music, dance and cuisines from around world. Finally, there was a gift certificate to Angie’s at Aqua - the Seafood Market at the Aquaculture School. The latter prize was generously donated by the Bridgeport Regional Aquaculture Science and Technology Education Center (BRASTEC), which is one of UB’s Dual Enrollment partner schools. Kirk Shadle, a BRASTEC teacher and UB Alumni, was able to secure the donation that day! Loud cheers erupted as members of each of the constituencies won and collected their treasures. Even if attendees did not win a raffle prize, **each** one was able to take home a UB piggy bank which was generously donated by the Dean of Students Craig S. Lennon’s Office.



Pictured above left to right: Raffle prizes donated by UB offices and high school partners; the Grand Prize of an International Basket of treats from the FRD Committee to advertise the 44th Annual International Festival that evening; and UB piggy bank giveaways for registered attendees.

Finally, as the busy day wound to a close, President Mark Scheinberg made remarks on behalf of Goodwin University, saying that “the leadership role you are taking in this work is inspiring.” Then, Dr. Elleithy announced the awardees in the High School, Undergraduate, Graduate, Doctoral, and Faculty Competitive categories. All honorees received an award certificate. In addition, students received UB Bookstore gift cards, courtesy of President Danielle Wilken’s Office and faculty received a cash prize generously donated by our sponsors, CT Next, Pullman & Comley, and Young America Capital (whose managing partner, Peter Formenk, is a double-degree UB alumnus in Finance).



Pictured above left to right: Mark Sheinberg, President of Goodwin University and Dean Khaled Elleithy giving the closing remarks.

Each awardee came up to the stage with their advisor to have a photo taken with both UB's and Goodwin's Presidents Wilken and Sheinberg, Dean Elleithy and Provost Im.

The list of awardees and their advisors, are listed and pictured¹ in the next pages.

¹ UB wishes to acknowledge that photographs were taken throughout the day's event by UB School of Engineering Senior Jonah DeJarnette.

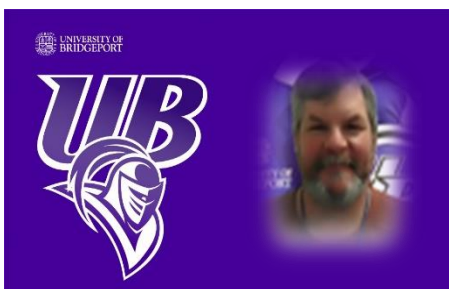
HIGH SCHOOL STUDENTS POSTER CATEGORY

1st Place - Aidan King

Utilizing Rooftop Gardens as a Means of Geothermal Cooling and Heating for Buildings Through Ground to Air Heat Transfer Systems ([Poster #91](#))

Bridgeport Regional Aquaculture Science and Technology Education Center

Advisor: Kirk Shadle ('06)



2nd Place - Francis Cavallaro

Developing and Testing a Novel Acne Reducing Spray for Face Masks and Accessories ([Poster #10](#))

Amity High School Science Research Program

Advisor: Cathy Piscitelli

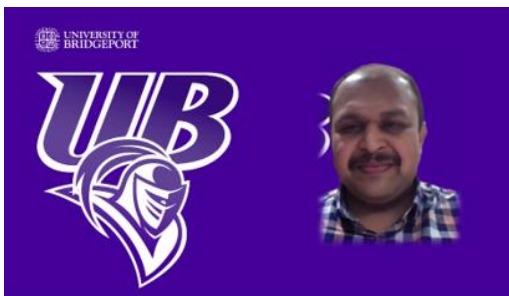


3rd Place - Sreejita Patra

Carbon Nanotube and Lung Surfactant Interactions In Light of Evolving Pathogen Strains ([Poster #25](#))

Fairfield Warde High School

Advisor: Bhusan Dharmadhikari, PhD ('15, CSE), Minnesota State University, Mankato



Honorable Mentions:

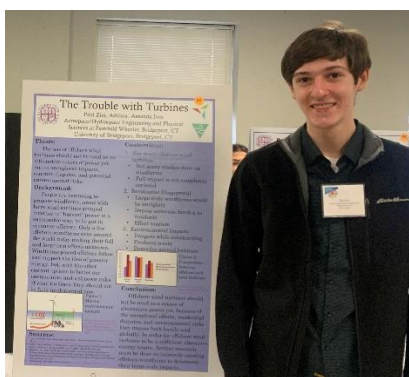
Angela Ferraro **Developing A Plant Based Sustainable And Renewable Replacement For A Polychloroprene Fabrication ([Poster #50](#))**
Bridgeport Regional Aquaculture Science and Technology Education Center
Advisor: Kirk Shadle ('06)



Luhai Tang **Participating in Extracurricular Activities, Motivation, and Creativity in High School ([Poster #116](#))**
Amity High School Science Research Program
Advisor: Cathy Piscitelli



Paul Zint **The Trouble with Turbines ([Poster #93](#))**
Fairchild Wheeler Interdistrict Magnet School's Aerospace/Hydrospace Engineering and Physical Sciences
Advisor: Amanda Ives



UNDERGRADUATE STUDENTS POSTER CATEGORY

1st Place - Aleksia Shena, Juhi Solanki, Gardison Jean

Novel Therapeutic Inhibitors Having Sugar Moiety Targeting HER2/EGFR as Anticancer Agent ([Poster #41](#))

College of Science and Society - Department of Chemistry

Advisor: Abu Hossion, PhD



2nd Place - Sief Addeen Atari, Celso Lopez, Eric Bialczak

Disability Assistant System Using Brain-Computer Interface and EEG Signals ([Poster #75](#))

College of Engineering Business, & Education - School of Engineering - Department of Electrical and Computer Engineering

Advisors: Ahmed El Sayed, PhD ('11 & '16) and Ausif Mahmood, PhD

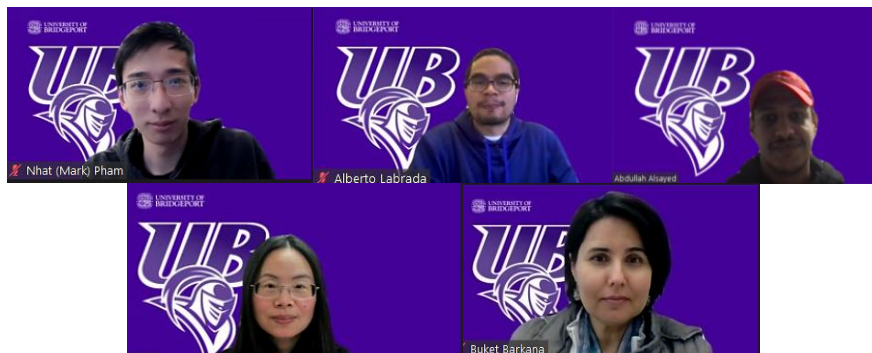


3rd Place - Nhat Pham, Alberto Labrada, Abdullah Alsayed

Multi-Disciplinary Design of a Modular Controlled Hydroponic System ([Poster #82](#))

College of Engineering Business, & Education - School of Engineering - Departments of Mechanical Engineering and Electrical Engineering

Advisors: Junling Hu, PhD and Buket Barkana, PhD



Honorable Mentions:

JangKun Suguri, Rishi
Chowdary, Chandra Kanth,
Sai Akhil Kumar

Implementation of Cloud Storage in Blockchain Technology ([Poster #64](#))
College of Engineering Business, & Education
School of Engineering - Department of Computer Science & Engineering
Advisor: Omar Abuzaghleh, PhD ('14)

Kyungmin Um, Thania
Flores, Jihyun Ahn

Smart Blind ([Poster #67](#))
College of Engineering Business, & Education
School of Engineering - Department of Computer Science & Engineering
Advisor: Abhilasha Tibrewal ('01)



GRADUATE (MASTER'S) STUDENTS POSTER CATEGORY

1st Place - Adejoke Ifafesobi

The Impact of Political Influence on Nigerian Economy ([Poster # 107](#))

College of Engineering Business, & Education

Ernest C. Trefz School of Business

Advisor: Timothy Raynor, DBA



2nd Place - Karamjeet Singh Sardar, Naga Pranathi, Mahasimha Teja Reddy, Aryaj

Scalability: One Of The Main Challenges Of a Blockchain ([Poster #61](#))

College of Engineering Business, & Education

School of Engineering - Department of Computer Science & Engineering

Advisor: Omar Abuzaghle, PhD ('14)



3rd Place - Eva Chavez Chico, Sarah Briceno, Gema Gonzalez

Natural diatoms dopped with AuNPs as drug delivery systems and comparison with diatoms decorated with graphene ([Poster #49](#))

College of Engineering Business, & Education

School of Engineering - Departments of Biomedical Engineering and Mechanical Engineering

Yachay Tech University, Ecuador's Department of Physical Sciences and Engineering

Advisor: Prabir Patra, PhD



Honorable Mentions:

Judy Apicella

Research of the Obstacles in the Treatment of Chronic Lyme Symptoms and the use of the Herbal Formula Phoenix Rising to Aid in Chronic Fatigue, Pain and Brain Fog in this Population ([Poster #38](#))

College of Health Sciences, Nutrition Institute

Advisor: Stephen Jackowicz, PhD, Traditional Chinese Medicine

**Khalid Alshuaibi, Maram
AL Daraiseh, Mohammed
Aljamal, Abdullah
Aldwean**

Blockchain and Cryptocurrency Challenges: Toward Environment-Friendly Mining Process ([Poster #59](#))

College of Engineering Business, & Education

School of Engineering - Department of Computer Science & Engineering

Advisor: Omar Abuzaghleh, PhD ('14)



DOCTORAL STUDENTS POSTER CATEGORY

1st Place - Sean Heffron

Expectations of Parent Involvement for First-Year Students: Comparing Parent and University Expectations of Communication in a Consumer Market ([Poster # 111](#))

College of Engineering Business, & Education

School of Education

Advisor: Kathleen Wallace EdD ('20)



2nd Place - Eugene P. Gerety

Decoding Extreme High-Density 2D Matrix Barcodes: Circumventing Edge Aliasing ([Poster #54](#))

College of Engineering Business, & Education

School of Engineering - Department of Computer Science & Engineering

Advisor: Khaled Elleithy, PhD



3rd Place - Feyisetan Dania

The Impact of Blockchain and Algorithm on FinTech ([Poster #99](#))

College of Engineering Business, & Education

School of Engineering - Department of Technology Management

Advisor: Christian Bach, PhD



Honorable Mentions:

Emilyann Rudzinski

Chiropractic Management of a Patient With Tinnitus ([Poster #37](#))

College of Health Sciences

School of Chiropractic

Advisors: Matthew Funk, DC and Anthony Onorato, DC



Lauren K. Francese

The Assessment of Historical Perspective-Taking: A Proposed Study to Develop a Measurement Instrument ([Poster #112](#))

College of Engineering Business, & Education

School of Education

Advisor: Ioana Badara, PhD



Peiqiao Wu

Molecular Dynamics Simulation of [2]Rotaxane Switch ([Poster #71](#))

College of Engineering Business, & Education

School of Engineering - Department of Computer Science & Engineering,

Biomedical and Mechanical Engineering, Electrical and Computer Engineering

Minnesota State University, Mankato

Department of Electrical and Computer Engineering and Technology

Advisors: Xingguo Xiong, PhD; Prabir Patra, PhD, and Bhushan Dharmadhikari, PhD ('15)



FACULTY COMPETITIVE POSTER CATEGORY

Distinguished Faculty Competitive Award - Mya Scarlato, EdD

“This is Going to be a Learning Curve, Especially Because You're White”: Becoming an Anti-racist Music Teacher in a Majority Indigenous Classroom ([Poster # 3](#))

College of Science and Society – Arts and Humanities

College of Engineering Business, & Education

School of Education



Honorable Mentions:

Emmett Hughes, DC ('97)



Pilot Study Assessing the Effect of Fascial Manipulation on Fascial Densifications and Associated Pain ([Poster # 1](#))

College of Health Sciences

School of Chiropractic

Co-Authors: March Pitcher, PhD; Tina Freilicher, PhD; Jessica Koenig, RVT, RDCS, RDMS; Robert Lee, DC, LAc

Randy Laist, PhD



Trump Zombies ([Poster # 2](#))

UB's College of Science and Society

Arts and Humanities

Goodwin University's School of Applied Liberal Arts and Social Sciences

Ahmed El Sayed, PhD ('11, '16)



Neural Models for 3D Face Generation and Recognition ([Poster # 4](#))

College of Engineering Business, & Education

School of Engineering – Department of Electrical Engineering, Computer Science and Engineering

Co-Author: Tarek Sobh, PhD and Ausif Mahmood, PhD

Closing Remarks

Khaled Elleithy ended the day by stating that, “The ongoing research at UB, featured on this 2022 Faculty Research Day and over the last 11 years, supports our GOAL of developing a ***world-class workforce*** that is essential to the continued growth of industries and communities in *Bridgeport*, throughout *Connecticut*, the *United States* and the *world*.”

All this could not have been possible without financial support from our corporate sponsors - ***CT Next***; Industry Advisory Board members representing ***Pullman and Comley, LLC*** and ***Young America Capital***; ***Cislunar Aerospace Inc*** and ***Pepsico***. In addition, UB’s student clubs like the Biology Club and the UB School of Chiropractic Student Government Association as well as UB’s Admissions Office and President Danielle Wilken provided funding for the day’s event. Dr. Elleithy thanked our external faculty judges from Sacred Heart University, Samford University, and Columbia University – Drs. Sajal Bhatia, Tolga Kaya, Mary Yakimowski, and Glen Davenport - for taking time out of their busy schedules to evaluate their UB peers.

And, most importantly Dr. Elleithy recognized all who make this day possible – from the *thirty-one* dedicated faculty poster advisors who tirelessly mentor the next generation of researchers; to UB’s *fourteen* and GU’s *two* faculty, *nine* doctoral students, *sixteen* alumni, and industry partners who volunteered to review the posters in person and remotely; and lastly, the *fourteen* FRD committee members and numerous staff and students who ensured that your day with us left a lasting impression of UB’s Purple Knights’ innovative scholarship!



Special Thanks

UB Faculty Research Day Committee

Khaled Elleithy, PhD, FRD Committee Chair
Julie Demers, CRA, FRD Committee Co-Chair
Ioana Badara, PhD
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Trinadh Venna, MS ('16)
Kathleen Wallace, EdD ('20)

Faculty Competitive Poster Judges

Sajal Bhatia, PhD & Tolga Kaya, PhD
Sacred Heart University

Mary Yakimowski, PhD
Samford University

Glen Davenport, PhD
Columbia University

UB/GU* Faculty Student Poster Judges

Natalia Belfiore, PhD
Vinod Dhar, PhD*
Matthew Funk, DC
Wendy Garcia, ('11) EdD, ('04) MS, ('75) AS
Kevin Kelliher, PhD
Bruce Lorentzen
Marcia Lorentzen, EdD
Cheryl Lyon, ('07) ND
Susan Miklos, MSDH
Patricia Mulcahy-Ernt, PhD
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Linda Paslov, EdD
Anthony Ross Jr., PhD
David Trefera, PhD
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Vita A. Vernace, PhD*

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Mohamed Mohamed, CSE
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Feyistan Dania, TM

School of Chiropractic

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Zachary Nagy, DC
Rebekah Patton, DC

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Gabriel Ferreira Araujo ('21) BS, CE
Toufiquir Chowdhury ('15) MS, EE
Ali ELrashidi ('12) PhD, CSE
Samuel Kofi Erskine ('20), PhD, CSE
Shiva Ganesan ('20) MS, CS
Nadine Ghosn ('21) BS, ME
Samir Hamada ('16) PhD, CSE
Isaac Macwan ('14) PhD, CSE & BME
Neerbhaya JB Rana ('21) BS, CE
Shrishti Singh ('17) MS, BME
Kojo Twum-Barima ('21) BA, Int'l Bus.
Elmannai Wafa ('18) PhD, CSE

College of Science & Society

Maria Besselink ('19) BS, Psychology
Beltina Gjeloši ('13) BA, Int'l Political &
Economy ('15) MA, Global Dev. & Peace
Cura Yuan Zhang ('11) MA, Int'l Relations

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O'Connell, Yvrose Romulus, Malhar Sharma, Patricia
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UB Student Volunteers

*Mohammed Aljamal, Mohamed Mohamed, Suparshya
Babu Sukhavasi, Susrutha Babu Sukhavasi, Solomon
Adetiba, Saleh Alamri, Jonah DeJarnette
(Photographer), James Demers, Adejoke Ifafesobi,
Sushmitha Manchineella, Beth Murturi, Aswin
Natalapati, Joseph Robles, Adwaita Sadamsetty,
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Cathy Piscitelli, Amity High School

*Kirk Shadle ('06, MS) Bridgeport Regional Vocational
Aquaculture School*

*Amanda Ives, Fairchild Wheeler Inter-District Magnet
School - Aerospace Engineering Campus
Bhusan Dharmadhikari, PhD ('15, CSE)
Minnesota State University, Mankato*

*Independent Advisor Fairfield Warde High School &
Staples High School Students*

UB Faculty Poster Advisors

College of Engineering, Business & Education

Abhilasha Tibrewal, MS ('01, CS)

Ahmed El Sayed, PhD ('11 & '16), CSE

Ausif Mahmood, PhD

Buket Barkana, PhD

Christian Bach, PhD

Jani Macari Pallis, PhD

Junling Hu, PhD

Khaled Elleithy, PhD

Navarun Gupta, PhD

Omar Abuzagheh, PhD ('14, CSE)

Prabir Patra, PhD

Sarosh Patel, PhD ('12, CSE)

Xingguo Xiong, PhD

Zheng Li, PhD

Ellen Belitzky, MBA

Timothy Raynor, DBA

Arthur McAdams, PhD

Nancy DeJarnette, EdD

Kathleen Wallace, EdD

Ioana Badara, PhD

Claude Mayo, PhD

Patricia Buxton, EdD

College of Health Sciences

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Matthew Funk, DC

College of Science & Society

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James Casey, MS

Kathleen Engelmann, PhD

Natalia Belfiore, PhD

Abu Hossion, PhD

Kenneth Laist, PhD

David Kraft, PhD

Goodwin University Staff

*Phil Moore, Caleb Prue, Charissa Bass, Sibley
Muschinsky, Ben Travers*

2022 FACULTY RESEARCH DAY POSTER LIST

Key: **FC:** Faculty Competitive **FNC:** Faculty Non-Competitive, **D:** Doctoral, **M:** Master's, **UG:** Undergraduate, **HS:** High School

All virtual posters will appear on [UB ScholarWorks](#) - this is a digital service that collects, preserves, and distributes digital scholarship materials produced by the University of Bridgeport and its faculty and students.

COLLEGE OF ENGINEERING, BUSINESS AND EDUCATION SCHOOL OF ENGINEERING

BIOMEDICAL ENGINEERING			
Poster #	Name	Status	Poster Title
43	Andres Alcivar Carmigniani	M	Effects of Leukocyte-Platelet Rich Fibrin and Nanoporous Scaffolds on Cell Proliferation and Cell Migration
44	Sivakumarreddy Bapatu	M	Synthesis of nanoparticles from plants
45	Subha Parvathi Madamuthu	M	An integrative review of the challenges in 3D bioprinting
46	Roshan Kumar Bhatt	M	Determining the Location and Size of the Brain Tumor with 3D Slicer
47	Tribhuwan Tiwari	M	Machine Learning in Neurodegenerative Disorders
48	Nikshiptha Mulagada	M	3D Bioprinting of Hydrogels and Bone like Composites
49	Eva Chavez Chico	M	Natural diatoms dopped with AuNPs as drug delivery systems and comparison with diatoms decorated with graphene
COMPUTER ENGINEERING			
Poster #	Name	Status	Poster Title
51	Mohamed Mohamed	D	Campus Safety Mobile App
52	Susrutha Babu Sukhavasi	D	Pose Variance, Illuminations and Occlusions involved Driver Emotion Detection System
53	Suparshya Babu Sukhavasi	D	Hybrid CNN-SVM Classifier Framework for Driver Emotion Detection System
54	Eugene Gerety	D	Decoding Extreme High-Density 2D Matrix Barcodes: Circumventing Edge Aliasing
55	Ashfaq Anjum Shaik	M	Blockchain Adaptability in Internet of Thing (IoT) Environments
56	Junyeong Choi	UG	Blockchain-based Remittance Service
117	Nasser Alkhaldi	UG	Smart Car Parking System

COMPUTER SCIENCE AND ENGINEERING			
Poster #	Name	Status	Poster Title
58	Peter Clayton	M	A Decentralized Training Model for Machine Learning using Blockchain
59	Khalid Alshuaibi	M	Blockchain and Cryptocurrency Challenges: Toward Environment-Friendly Mining Process
60	Srilatha Thumati	M	Scalability Challenge
61	Karamjeet Singh Sardar	M	Scalability: One Of The Main Challenges Of a Blockchain
62	Jonah Dejarnette	UG	Energy Consumption and Reduction in Cryptocurrency

COMPUTER ENGINEERING TECHNOLOGY			
Poster #	Name	Status	Poster Title
63	Oled Ahmed	UG	ORE'S Lock

COMPUTER SCIENCE			
Poster #	Name	Status	Poster Title
64	Jangkun Suguri	UG	Implementation of Cloud Storage in Blockchain Technology
65	Gary Reeves	UG	Pawpharos: Pet Tracking Utilizing Bluetooth Low Energy Tags
66	Shoji Torikai	UG	Tailgate: Electric Skateboard Brake Light Module
67	Kyungmin Um	UG	Smart Blind

ELECTRICAL ENGINEERING			
Poster #	Name	Status	Poster Title
4	Ahmed El Sayed	FC	Neural Models for 3D Face Generation and Recognition
71	Peiqiao Wu	D	Molecular Dynamics Simulation of [2] Rotaxane Switch
68	Mina Gaber Wahba Ibrahim	M	Developing Strategies to Dispose the Dependency of Using Fossil Fuel Over Renewable Energy
69	Roshan Kumar Bhatt	M	Image Processing Techniques for Detecting Pneumonia
70	Ditoma Kanabia	UG	40Crash Alert System
72	Junyeong Choi	UG	Shopping-bot (Ecommerce Robot System)
73	Alberto Labrada	UG	Analysis of mitosis occurrence in breast histopathology images
74	Jacob Johnson	UG	Autonomous Network of Robots
75	Sief Addeen Atari	UG	Disability Assistant System Using Brain-Computer Interface and EEG Signals

MECHANICAL ENGINEERING			
Poster #	Name	Status	Poster Title
82	Nhat Pham	UG	Modular Hydroponic Controlled System Change to Multi-Disciplinary Design of a Modular Controlled Hydroponic System
83	Elphaz Gesesse	UG	Smart Doorknob Cleanser
84	Abdulrahman Alnahedh	UG	Renewable Energy Based Solar Desalinators
85	Armand Perez	UG	Waste Compression Bin
86	Derek Cerulli	UG	Water Injection of a Small Engine
87	Juan Palacios Silva	UG	Fluid System Design of a Pneumatic Seat
88	Elphaz Gesesse/Nhat Pham	UG	Portable Car-Washing System
89	Abdulrahman Alnahedh	UG	Process Flow Diagram of Distillation Tower
90	Abdullah Alkhaldi	UG	Vibrations of a Single Degree Freedom System

TECHNOLOGY MANAGEMENT

Poster #	Name	Status	Poster Title
94	Randy Williams	D	Business Intelligence Adoption: A Literature Review and Model Exploration
95	Eric Uwayezu	D	Strategic Analysis of Childhood Education Online Application (ABC)
96	Oladipupo Ogungbile	D	Autonomous Flight System
97	Jun Zhang	D	Enterprise Data Security Strategy against Cryptographic Ransomware
98	Noha Alharbi	D	Residential Pharmaceutical Deliveries: SWOT and TOWS Analyses of Drone Delivery Service
99	Feyisetan Dania	D	The Impact of Blockchain and Algorithm on FinTech
100	Saddam Alkhamaiesh	D	Assessment of Residential Internet Plans: Using a SMART Decision Analysis Approach
101	Abdullah Aldwean	D	Blockchain Technology in Healthcare: Key Factors determine the Adaptation of Blockchain in Healthcare form Multiple Perspectives

SCHOOL OF BUSINESS

Poster #	Name	Status	Poster Title
103	Gew-Rae Kim	FNC	Foreign Currency Reserve & Function: US, China, & Russia
104	Congsheng Wu	FNC	Economic Impacts of the Covid-19 Pandemic
105	Congsheng Wu	FNC	The Effect of Economic Freedom on Economic Growth: A Reexamination
102	Said Essabbani	M	Banking Customer Service Satisfaction
106	Gopal Karki	M	Impact of Pandemic on the U.S. Economy
107	Adejoke Ifafesobi	M	The Impact of Political Influence on Nigerian Economy

SCHOOL OF EDUCATION

Poster #	Name	Status	Poster Title
108	Judith Moeller	FNC	Impact of the edTPA on teacher candidates' perceptions of preparedness to teach
109	Claude Mayo	FNC	Trying for the EdMal Trifecta: Theorizing Contract-Based Educational Malpractice within Higher Education
110	Patricia Mulcahy-Ernt	FNC	Social Justice CAS Standards in Learning Assistance Program Evaluation
118	Jeffery Vance	FNC	A Qualitative Study of the Reasons Why Nontraditional Students Have Chosen to Attend College at a Later Point in Their Lives
111	Sean Heffron	D	Expectations of Parent Involvement for First-Year Students: Comparing Parent and University Expectations of Communication in a Consumer Market
112	Lauren Francese	D	The Assessment of Historical Perspective-Taking: A Proposed Study to Develop a Measurement Instrument
113	Rebecca Ciullo	D	Graduate Student Retention: An Examination of Factors Affecting Persistence Among Master of Business Administration Students
114	Nour Awad	D	Teachers Perceptions of the Impact of Rapid Transition to Online Learning as a Result of COVID-19 in Spring of 2020
115	Abby Manente	M	First-Year Experience (FYE) & Student Success and Engagement Among First-Generation Students

COLLEGE OF SCIENCE AND SOCIETY

Poster #	Name	Status	Poster Title
2	Kenneth Laist	FC	Trump Zombies
3	Mya Scarlato	FC	"This is Going to be a Learning Curve, Especially Because You're White": Becoming an Anti-racist Music Teacher in a Majority Indigenous Classroom
39	Matthew Jagdeo	M	Ascorbic Acid Determination in Chinese Hamster Ovary Cells Exposed to Nickel and Chromium
40	Juhi Solanki	UG	The Effect of Light Intensity and Color on Above and Below Ground Development in Arabidopsis thaliana
41	Aleksia Shena	UG	Novel Therapeutic Inhibitors Having Sugar Moiety Targeting HER2/EGFR as Anticancer Agent
42	Anders Hannes Nilsson	UG	Evolution of Asteroid Orbits in a Restricted Three-Body Simulation

COLLEGE OF HEALTH SCIENCES

Poster #	Name	Status	Poster Title
1	Emmett Hughes	FC	Pilot study assessing the effect of Fascial Manipulation on fascial densifications and associated pain
33	Matthew Funk	FNC	Dry needling for spine related disorders: A scoping review
34	Cheryl Lyon	FNC	Characteristics of chronic musculoskeletal pain sufferers treated in a university-affiliated complementary and integrative health care clinic
35	Cheryl Lyon	FNC	Effects of omega-3 fatty acid supplementation on whole blood fatty acid levels
37	Emilyann Rudzinski	D	Chiropractic Management of a Patient With Tinnitus
38	Judy Apicella	M	Research of the Obstacles in the Treatment of Chronic Lyme Symptoms and the use of the Herbal Formula Phoenix Rising to Aid in Chronic Fatigue, Pain and Brain Fog in this Population

GOODWIN UNIVERSITY

Poster #	Name	Status	Poster Title
27	Lisa Fanelli	FNC	Instructing Clinical Educators in Universal Design for Learning: A Pilot Study
28	Karrie Morin	FNC	Open Educational Resources (OER) A Grass-Roots Initiative at Goodwin University
29	Robin Young-Cournoyer	FNC	Nursing Student Hackathon...A must not a maybe
30	Paul Danese	FNC	Machine learning models that can identify misclassified adverse reactions within the FDA's medical device safety surveillance database
31	Vivienne Friday	FNC	Open Educational Resources (OER): Equitable and Affordable
32	Kimberly Reese	FNC	A Gender Comparison Mixed-Methods Study: Creating Veteran-Inclusive Campuses

UNIVERSITY OF BRIDGEPORT STAFF

36	Nereida Quiles-Wasserman	FNC	Accelerated Degree Programs: Facilitate Degree Completion for Non-traditional Students
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HIGH SCHOOL PARTICIPANTS

Amity High School		
Poster #	Name	Poster Title
5	Annie Zhan	Optimizing the Design of an Absorption-Capable Hydrocolloid Wound Dressing to Prevent Infection
6	Aadya Wijesekera	Modifying a Mobile Application to Help Oral Immunotherapy Users Track Their Symptoms, Incidence of Allergic Reactions, and Progress
7	Aaron Babajanyan	Creating a More Efficient Fixation Device for Distal Femur Fractures Based on Finite Element Analysis of Different Plate and Screw Scenarios
8	Audrey Cummings	Utilizing Gene Utilizing Gene Set Enrichment Analysis to Identify Genetic Pathways for Cannabis Use
9	Eric Novak	Determining if the Expression of Specific Genomes - Specifically SHH(Sonic Hedgehog) RNA Codes- are Associated with the Regenerative Ability of the Axolotl Limb
10	Francis Cavallaro	Developing and Testing a Novel Acne Reducing Spray for Face Masks and Accessories
11	Karishma Bulsara	Analyzing the Effect of Sodium Levels on the Onset of Cerebral Vasospasm After Subarachnoid Hemorrhage
12	Melinda Lu	In Vivo Imaging of Structural Connectivity and Synaptic Density in Alzheimer's Disease
13	Piyush Bahel	Developing an Inductive Stent to Accurately Detect the Occurrence of In-Stent Restenosis
14	Shreya Hebbar	The Effect of Time of Day, Social Interaction, and Activity on Adolescents' Emotions within a School Day
15	Yuqi "Annie" Liu	Analyzing the Effect of Toneless Language Acquisition on Tone Discrimination and Production Observed in Mandarin Chinese Native and English Nonnative Speakers
16	Matthew Li	The Effect of Playing Position in High School American Football on the Number of Impacts Sustained To the Head
57	Edgar Babajanyan	Inventing an Artificially Intelligent Autonomous Drone to Secure School Campuses and Businesses Utilizing Computer Vision Technology to Detect Suspicious and Irregular Behaviour
76	Anthony Sharonov	Designing and Optimizing a More Efficient and Inexpensive Optical Component for Thermal Cameras
116	Luhai Tang	Participating in Extracurricular Activities, Motivation, and Creativity in High School

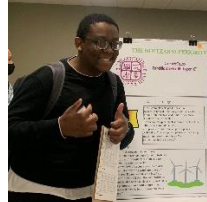
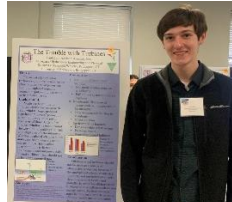
Bridgeport Regional Vocational Aquaculture School

Poster #	Name	Poster Title
17	Albert Capodanno	Using Pyrethrum Extract From <i>Chrysanthemum cinerariifolium</i> As a Natural Insecticide
18	Cooper Carr	A Novel Mitigation Technique to Control the Spread of the Invasive Spotted Lanternfly(<i>L.delicatula</i>) Through Cardiac Glycoside Extracts
19	Grace Hilton	The Use of Secondary Plant Metabolites to Reduce <i>Pseudogymnoascus destructans</i> Transmission Among North American Bats
20	Jackson Warters	Optimizing Desalinization of Industrial Brine Through Temperature Swing Solvent Extraction
21	Kelsey Farber	Absorbing High Concentrations of Nitrogen Using Biochar as a Preventative Measure to Mitigate the Dinoflagellate <i>Karenia brevis</i>
22	Kailey Smith	Utilizing Micronutrient Activity to Facilitate Metabolic Reprogramming in Mucopolysaccharidosis Type IIIA
23	Kennedy Carr	The Use of Sodium Bicarbonate as a Local Buffer to Decrease Ocean Acidity in Localized Areas to Increase the Oyster Growth
24	Sarah Davis	Quantifying the Interspecific Impacts of the Asian Shore Crab with the Atlantic Blue Crab and the American Lobster in Long Island Sound
50	Angela Ferraro	Developing A Plant Based Sustainable And Renewable Replacement For A Polychloroprene Fabrication
77	Allison Greenburg	The Development of an Inexpensive, Simple, and Effective Application of Off the Grid Solar Disinfection of Potable Water
91	Aidan King	Utilizing Rooftop Gardens as a Means of Geothermal Cooling and Heating for Buildings Through Ground to Air Heat Transfer Systems



**Fairchild Wheeler Interdistrict Magnet Campus
Aerospace/Hydrospace Engineering & Physical Science**

Poster #	Name	Poster Title
78	Abel Gebretinsae	A True Source of Energy
79	Caleb McCallop	The Nuclear Superiority
80	Stephan Kaine	Why Do People Think Solar Panels Violate the Environment?
81	Thomas Kaine	Solar Power Is a Way of Conserving Energy That Violates the Environment
92	Isabella Vilarino	Wind Turbines
93	Paul Zint	The Trouble with Turbines



Fairfield Warde High School

25	Sreejita Patra	Carbon Nanotube and Lung Surfactant Interactions In Light of Evolving Pathogen Strains
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Staples High School

26	Tanvi Gorre	Computational Study on the Effects of Granzyme A on Follicular Lymphoma Microenvironment During CAR T Cell Therapy
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UB Faculty Research Day 2022



Friday, April 1, 2022

9 a.m. – 4:00 p.m.

John J. Cox Student Center