

University of Bridgeport 2021 Faculty Research Day 10<sup>th</sup> Anniversary Outcomes Report

### **Executive Summary**

April 9, 2021 marked the tenth Faculty Research Day (FRD) since its inauguration in 2011. (*Note:* Because of the global pandemic, FRD was not held in 2020.)

The event, although virtual, continued as the premier campus venue for showcasing the diverse array of faculty and student research. For many poster presenters, this event is the first stop before competing in professional conferences throughout the U.S. and around the globe.

A total of 64 research projects were presented by faculty and students representing a diversity of academic disciplines. This year, 219 people registered for the virtual daylong event (126 UB Faculty/Students/Staff; 66 non-UB; and 27 UB Poster Advisors).

Once again, select area high school students participated via 13 posters presented by students from Bridgeport Regional Vocational Aquaculture School and the Fairchild Wheeler Magnet High School's Biotechnology & Zoological Sciences.

Faculty Research Day is a competition as well as a display of research conducted by faculty and students. UB faculty have the option to compete or submit posters in the non-competitive category. This year, the faculty competitive posters were judged by faculty from Goodwin University, Sacred Heart University, University of Connecticut, and University of New Haven.

Fourteen UB faculty judged the masters and doctoral student posters; nine UB doctoral and masters students and nine 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.

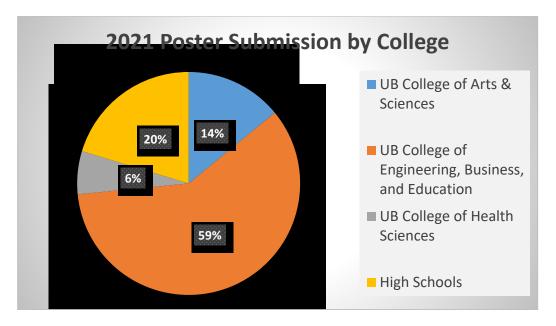
Posters were on display on UB's FRD webpage. Of the 64 poster presenters, 43 (67%) submitted a 3-5 minute video of their research to compete for top awards and a cash prize.

Social media outreach on Facebook and LinkedIn (#UBFRD) was intensified in the weeks leading up to the event on April 9<sup>th</sup>. During the day's live stream event on UB's FRD webpage, there were 177 unique views and 235 live views.

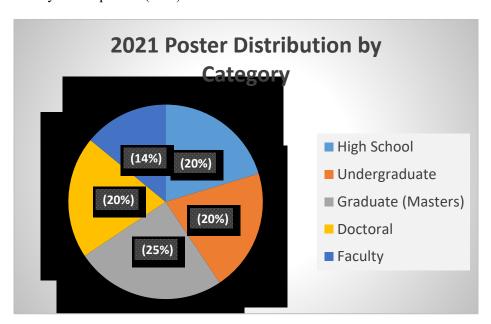
This year's total 64 posters are sourced as follows: 38 (59%) from the College of Engineering, Business, and Education; 9 (14%) from the College of Arts & Sciences; 4 (6%) from the College of Health Sciences; and 13 (20%) from area high schools. The distribution of submissions by college and high schools is presented in the chart on the next page.

Khaled Elleithy, Chair, 2021 FRD Committee

Julie Demers, Coordinator, 2021 Committee



The distribution of poster submission by category reveals masters-level graduate students as the majority participant category, with 16 (25%) of the 64 posters, followed by undergraduate, doctoral, and high school categories, each having 13 posters (20%), and faculty with 9 posters (14%). See chart below.



### Welcoming Remarks

Faculty Research Day began with Dr. Khaled Elleithy, Interim Dean, College of Engineering, Business, and Education, welcoming the 219 attendees who registered – 126 were current UB faculty/staff/students (of this number, 27 served as UB Poster Advisors) and 66 were alumni (26)/ high school students (20), and community members (20). Dr. Elleithy commended the 51 UB faculty and students as well as 13 high school students who submitted posters and videos despite the challenges of conducting research during a pandemic.

Later, Dr. Michael Lohle, Senior Lecturer of Management and Information Systems of the School of Business, shared that attendees could check out the FRD Zoom Room where they could meet UB's new Director of Alumni Relations, Jay Abrams, to learn about exciting activities planned (e.g. UB's Day of Giving on May 4<sup>th</sup>) for alumni to get involved; meet the Director of Career Development, Taylor Van Antwerp, to learn about UB's 2021 Graduate LookBook (which promotes the Class of 2021); and meet up with UB FRD organizers to chat about sessions, give feedback or say hello.

### Morning Posters Finalist Interview Sessions

Attendees were then invited to join the poster judging sessions. With the NEW poster judging app, poster judges selected the top 5 finalists in each division - high school, undergraduate, graduate, doctoral and faculty competitive. These finalists were on announced on April 8 and then were invited to a live virtual interview on the morning of April 9<sup>th</sup>.

The **High School Poster Finalists** were Clayton Nyiri, Sienna Montregrano, Gabriella Silva and Savoy Volcy from Bridgeport Regional Aquaculture Science and Technology Education Center and Shahmima Akther of Fairchild Wheeler's Interdistrict Magnet High School's Biotechnology Research & Zoological Sciences. The panel interview was moderated by Drs. Omar Abuzaghleh, Assistant Professor of Engineering and Technology Computing, and Mark Pitcher, Director of Health Sciences Inter-Professional Research.

The **Undergraduate Poster Finalists** were Jonah Galan, Jessica Noble, and Mohammad Shoaib Arshad from the College of Arts and Sciences; Mohammad Abueissa, Mohammed Alghamdi, Abdullah Salum, Badr Almutawa, Gabriel Ferreira Araujo and Tanyaradzwa Matasva from the School of Engineering. The panel interview was moderated by Drs. Kevin Kelliher, Associate Professor of Chiropractic, and Miad Faezipour, Associate Professor of Computer Science and Engineering and Biomedical Engineering.

The **Graduate Poster Finalists** were Laarni Beciril from the School of Engineering; James Durrell and Sara Palacio from the School of Arts and Sciences and Necas Collins and Oyindamola Dosunmu from the School of Business. The panel interview was moderated by Drs. Nasir Sheikh, Associate Professor of Technology Management and Kevin Kelliher.

The **Doctoral Poster Finalists** were Mohamed Mohamed, Suparshya Babu Sukhavasi, Susrutha Babu Sukhavasi and Muhammad Wasimuddin from the School of Engineering and Kathleen Wallace from the School of Education. The panel interview was moderated by Drs. Mathew DiMond, Assistant Professor of Clinical Sciences and Omar Abuzaghleh.

The **Faculty Competitive Finalists** were William Landesman and Liane Leedom from the College of Arts and Sciences; Miad Faezipour and Nasir Sheikh from the School of Engineering; and Mary Warner from the College of Health Sciences. The panel interview was moderated by Julie Demers, from the Office of Corporate, Foundation, Faculty and Institutional Grants, and Drs. Omar Abuzaghleh and Mathew DiMond.

There were various research posters related to the pandemic, "Impact of Covid-19 on Business Supply Chain Management," to "Covid-19 Rapid Detection Techniques: Review and Perspective," to "Covid-19 - Conspiracy Belief's." Health Sciences posters included, "Chiropractic Management of Atypical Hard Palate Pain: A Case Report," to "Inconsistencies of Spurling's Test in Chiropractic Education: A Survey Study Design," to "Effects of DIO2 Thr92Ala SNP on Thyroid Hormonogenesis: A Narrative Review of the Literature."

### Morning Speaker

**Mike Roer**, President, Entrepreneurship Foundation Inc. spoke about "How Investors Evaluate the Commercial Potential of New Technologies." Mr. Roer pointed out that while research can lead to a journal publication, it can also provide significant income for the investigator through licensing or commercialization. To help FRD attendees analyze current or planned R&D projects for investment potential, he related proven metrics used by experienced venture capitalists to identify the most promising opportunities.



Mr. Roer (*pictured left*) is the author of "*Launching a New Venture*, and *Business Planning*." He is the past Director of the Connecticut Venture Group, Association for Corporate Growth (CT, NY, and NJ chapters), Strategic Leadership Forum; Founder, Connecticut Angel Group; Entrepreneur-in-Residence at Fairfield University and University of Bridgeport.

### Lunchtime Keynote Speaker

**Dr. Vincent Wilczynski**, Deputy Dean of the Yale School of Engineering & Applied Science and James S. Tyler Director of the Yale Center for Engineering Innovation & Design. His topic was, "A Yale Innovation: the Y-Shaped Engineer." Dr. Wilczynski shared an insightful presentation on how Yale University's engineering and applied science faculty, researchers, and students develop new materials, engineering tissues, building photon-powered machinery, with the end goal of leading collaborative efforts toward solutions to improve the human condition. Yale students gain not only a fundamental knowledge of science and engineering, but also a strong understanding of the complex social, political, economic, and environmental implications that must be considered when developing complete solutions to global problems. In effect, Yale Engineering graduates are a unique breed that are called "Y-shaped" engineers.

As the Deputy Dean, Dr. Wilczynski (*pictured right*) helps plan and implement all academic initiatives, as well as manages the School's teaching and research resources and facilities. As the Director of the Center for Engineering Innovation & Design he leads efforts to promote collaboration, creativity, design and manufacturing activities at Yale's academic makerspace. His professional interests in Mechanical Engineering are data acquisition/analysis and mechanical design. He is the Treasurer of the FIRST Foundation (the world's largest engineering mentorship program) and is a Fellow of the American Society of Mechanical Engineering. Previously, he was the Dean of Engineering at the U.S. Coast Guard Academy and has had fellowships at the MIT Charles Stark Draper Laboratory, the Harvard School of Public Health and with the American Council on Education.



He has also served as the Vice President of Public Awareness for the American Society of Mechanical Engineers and was a Baccalaureate College Professor of the Year by the Carnegie Foundation, the only national award that recognizes outstanding college teaching.

### Afternoon Welcoming Remarks

UB's Interim President Stephen Healey provided brief remarks on how FRD is, "the good work of faculty's research and teaching that is made available to students – which is what is being celebrated today." Next, Interim Provost Manyul Im commented on the strength of universities as, "the knowledge students and faculty create," and he hoped that as UB approaches its 100<sup>th</sup> anniversary year that, "we can continue to celebrate various generations of scholars".

### 10th Anniversary Montage

Dr. Elleithy thanked Drs. Healey and Im for their support of FRD this year. He then introduced the video montage, which "shows a glimpse of what we we've done over the last 10 years with Faculty Research Day - the impact of research to engage students and help them provide solutions to problems that helps the community at large."

Created by Larry Locke Films, LLC, the montage featured the following former Faculty Research Day Winners (see Table 1 on next page) who represent a global alumni network in various careers and industry. More importantly, the montage showcases how FRD is a rich tradition that is UB's biggest academic campus event of the year.

Table 1. Former UB Faculty Research Day Winner Featured in 10th Anniversary Montage					
Name, UB Department, Current Company/Organization	Award (Year)				
Nilima Shroff, Engineering, Pitney Bowes	3 <sup>rd</sup> Place, Graduate ('11)				
Cura Yuan Zhang, CPIA, Discovery Inc. China	Honorable Mention, Graduate ('11)				
Carlos Colon, Biology, Nova Southeastern University College of Pharmacy	1 <sup>st</sup> Place, Undergraduate ('12)				
Pedro Ramos, Biology, Arnold & Porter, LLC	Honorable Mention, Undergraduate ('14)				
Tamer Abukhalil, Engineering, Alhussien bin talal University	3 <sup>rd</sup> Place, Graduate ('14)				
Toufiqur Rahman Chowdhury, Engineering, Nelnet Inc	1st Place, Graduate ('15)				
Muneer Alshowkan. Engineering, Oak Ridge National Laboratory	2 <sup>nd</sup> Place, Doctoral ('15)				
James Durrell, Biology, UB Graduate Program	3 <sup>rd</sup> Place, Undergraduate ('15)				
Zakareya Lasefr, Engineering, UB Web Application Specialist	1st Place, Doctoral ('16)				
Shrishti Singh, Engineering, George Mason University	1st Place, Graduate ('17)				
Samuel Ojetola, Engineering, Sandia National Laboratories	Honorable Mention, Graduate ('17)				
Taylor Brown, Biology, Sema4	3 <sup>rd</sup> Place, Undergraduate ('18)				
Mohammed Alyas, Engineering, Nordee Enterprise	People's Choice, Undergraduate ('18)				
Susrutha & Suprashya Babu Sukavasi, Engineering, UB Ph.D. Program	3 <sup>rd</sup> Place, Doctoral ('18)				
Wafa Elmannai, Engineering, Manhattan College	3 <sup>rd</sup> Place – Graduate ('13) 3 <sup>rd</sup> & 1 <sup>st</sup> Place, Doctoral ('15/'18)				
Michael Lohle, Business	Faculty Competitive ('15/'17)				

#### **Oral Presentations**

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

**Özden Tozanli**, who is currently a postdoctoral associate at Massachusetts Institute of Technology, spoke on "*Evaluation of Trade-in-to-Upgrade Strategies in Digital Twin Disassembly-to-Order Systems*." (In 2019, Dr. Tozanli received her Ph.D. in UB's Technology Management program and was recognized as the 1<sup>st</sup> Place Winner in the Doctoral division.). Her study presents the concept of digital twin disassembly-to-order systems using IoT- enabled blockchain platform to determine the optimal trade-in-to-upgrade policy. In turn, a discrete-event simulation model is developed to obtain the expected cost of the disassembly-to-order system. Then, optimal incentives for varying product qualities are then computed through a dynamic simulation-based game model.

Next, **Morgan Cobbs**, who is currently a Junior majoring in Mechanical Engineering, had a recorded presentation on "Grand Challenges Scholars Program and 2019 Global Grand Challenge Summit (GGCS)." In September of 2019, Mr. Cobbs was selected to attend the GGCS in London, England. He met many students from around the world who worked on projects geared towards the two main themes, "Will Artificial Intelligence benefit humanity?" and "Can the earth sustain 10 billion people?" Projects ranged from filtration systems to newly synthesized alternatives to plastic. All of the projects were informative and thought-provoking. While in London, he enjoyed the food, scenery, and vibrant atmosphere. He had an opportunity to experience a different country as well as a whole new continent, an opportunity that very few college students get. He had a chance to see the global side of engineering.











*Pictured above left to right:* Dr. Ozden Tozanli, Morgan Cobbs, Dr. Cheryl Lyon, Sherri Dente, Dr. Danielle Wilken were presenters at this year's Faculty Research Day afternoon oral talks.

The second part of the oral presentations shifted to UB faculty and staff presentations.

**Dr. Cheryl Lyon**, Assistant Professor of Clinical Sciences, at UB's School of Chiropractic, presented her research on "Characteristics of Chronic Musculoskeletal Pain Sufferers Treated in a University Affiliated Complementary and Integrative Health Care Clinic." Dr. Lyon received her Naturopathic Doctorate degree from UB in 2007. In 2018, Dr. Lyon was a UB Seed Grant where she received funds to conduct research with co-authors Kena A. McDermott, Kimberly M. Sanders, Tina Freilicher, and Mark H. Pitcher. She began her talk about how chronic pain is a substantial driver of high health care costs and disability, especially among certain demographic and socio-economic groups. These disparities in the experience and treatment of pain based on age, sex and race are significant. A host of factors, including nutrition and inherited genetic polymorphisms may contribute to these disparities. Considering that patients seeking complementary and integrative health (CIH) approaches for chronic pain are dramatically under-studied, her team assessed the role of nutritional, genetic and other factors in a sample of chronic musculoskeletal pain sufferers from a unique patient population seeking CIH care at UB's urban university-affiliated clinic.

**Sherri Dente, Esq.**, UB's Director of Technology Transfer and Venture Creation, spoke on "Growing the CTNext Program to Assist Even More UB Entrepreneurs." CTNext, a subsidiary of Connecticut Innovations, has awarded a grant to UB for the purpose of growing and expanding innovation, entrepreneurship, technology transfer and commercialization in the state. The funding is used to award mini grants to students and faculty at UB, Fairfield University, Housatonic Community College and Norwalk Community College for the acceleration of technology inventions and startups to build new capabilities. UB is in the 4<sup>th</sup> year of this program and continues to expand innovation and entrepreneurial capabilities with the ultimate goal of creating new jobs and businesses and improving the economic environment in Connecticut.

Attorney Dente received her JD with a concentration in Intellectual Property from Quinnipiac University School of Law and a BS in Industrial and Management Engineering from Rensselaer Polytechnic Institute (RPI). She is a patent attorney with over 13 years of experience at Wiggin & Dana LLP, General Electric, and RPI.

Dr. Khaled Elleithy introduced FRD's final presenter **Danielle Wilken**, **Ed.D.** Provost, Goodwin University who spoke on "UB's New Chapter: Resource Sharing & Scholarly Pursuits." She talked about new collaborations as UB starts its new chapter with Goodwin University. Together, our institutions will rise and address the 21<sup>st</sup> century challenges.

Dr. Wilken joined Goodwin in 2002 and was appointed provost and Dean of Faculty in 2019. She serves as the University's Chief Academic Officer, and her responsibilities include overseeing the Center for Teaching Excellence, distance education, and all issues related to curriculum, teaching, and learning. In addition, she ensures compliance with regional and programmatic accreditors. She has extensive experience in new program and curriculum development, including the establishment of graduate degree programs. Dr. Wilken launched and continues to champion the Universal Design for Learning teaching initiative, which has resulted in higher levels of faculty engagement, scholarships at Goodwin, and the recent creation of Goodwin University's Institute for Learning Innovation. She holds an Ed.D. in Educational Leadership from the University of Hartford, a master's degree in Health Care Policy & Management, and bachelor's degrees in Clinical Laboratory Sciences and Biology from the State University of New York at Stony Brook.

### Awards Ceremony

The day ended with the awards ceremony. Dr. Michael Lohle, Senior Lecturer of Management and Information Systems of the School of Business and Julie Demers, from the Office of Corporate, Foundation, Faculty and Institutional Grants announced the 1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup> Place and Honorable Mention awardees for the high school, undergraduate, graduate, and doctoral categories.

Awardees: High School Students

Bridgeport Regional Aquaculture Science and Technology Education Center

**Advisor: Kirk Shadle** 

1<sup>st</sup> Place: Sienna Montregrano (Poster #50), "Determining the Efficacy of Zingiber officinale to Promote the Bioremediation of Bioplastics through Amylase Hydrolysis"

**2nd Place: Gabriella Silva** (Poster #56), "Determining the Proliferation of Cellular Oxidative Stress through Blue Light Induced ROS Formation" – not pictured

**3rd Place: Clayton Nyiri** (Poster #51), "Evaluating the Intraspecific and Reciprocal Reaction Within Grouped Learn Shark Behavior Patterns"

**Honorable Mention: Savoy Volcy** (<u>Poster #55</u>) "Utilizing Electromagnetic Pulse Generation to Disrupt the Electron Transport Chain as a Novel Technique to disrupt Harmful Algal Blooms"









Pictured above left to right: Sienna Montregrano, Clayton Nyiri, Savoy Volcy, Kirk Shadle (Advisor)

Fairchild Wheeler Interdistrict Magnet School's Biotechnology Research & Zoological Sciences Advisor: Cynthia Crudale

Honorable Mention: Shahmima Akther (Poster #60), "A Natural Remedy To Decrease Asthma"

Co-authors: Cynthia Crudale, Elisa Logush, and Michael King





Pictured above left to right: Shahmima Akther and Cynthia Crudale (Advisor)

Awardees: Undergraduate Students

1st Place: Jonah Galan, Jessica Noble, and Donna Demanarig (Poster #38), "Phenomenological Analysis on First-

Generation College Students" School of Arts and Sciences







Pictured above left to right: Jonah Galan, Jessica Noble, and Dr. Donna Demanarig (Advisor)

2<sup>nd</sup> Place: Mohammad Abueissa, Mohammed Alghamdi, Abdullah Salum, Badr Almutawa, Xingguo Xiong (Poster #41), "Raspberry Pi-Text Recognition Robot" School of Engineering





Pictured above left to right: Mohammad Abueissa and Badr Almutawa

3rd Place: Gabriel Ferreira Araujo, Miad Faezipour, Abdel-Shakour Abuzneid (Poster #39), "Applications of ECG

Signal Analysis for R-R Complex Detection" School of Engineering







Pictured above left to right: Gabriel Ferreira Araujo, Drs. Miad Faezipour & Abdel-Shakour Abuzneid (Advisors)

Honorable Mention: Tanyaradzwa Matasva and Ausif Mahmood (Poster #40) "VICO-Video Conferencing

Application" School of Engineering



Pictured above: Tanyaradzwa Matasva

Honorable Mention: Mohammad Shoaib Arshad and Chunjuan Wei (Poster #37), "Lessons in Lawfare: Revisiting the South China Sea Ruling 5 Years On" School of Arts and Sciences





Pictured above: Mohammad Shoaib Arshad and Dr. Chunjuan Wei (Advisor)

Awardees: Graduate (Masters) Students

1<sup>st</sup> Place: Laarni Beciril and Nuriye Elif Kongar-Bahtiyar (Poster #32), "Implementing Product Diversification Strategies: A Construction Industry Perspective" School of Engineering





Pictured above left to right: Laarni Beciril and Dr. Nuriye Elif Kongar-Bahtiyar (Advisor)

2<sup>nd</sup> Place: James Durrell, Tracy Zarrillo, Kimberly Stoner, William Landesman, Kathleen Engelmann (Poster #23), "Urban Native Flora and Noteworthy Bee Species: Bridgeport, CT" School of Arts and Sciences





Pictured above left to right: Drs. William Landesman & Kathleen Engelmann (Advisors)

**3<sup>rd</sup> Place: Necas Collins and Elena Cahill** (<u>Poster #27</u>), "Can a Crowdfunding Platform Help to Rejuvenate the Jamaican Livestock Market While Increasing the Localisation of Their Food Supply Chain?" School of Business





Pictured above left to right: Necas Collins and Elena Cahill, J.D. (Advisor)

Honorable Mention: Oyindamola Dosunmu and Michael Lohle (Poster #26), "Perceived Wage Disparity in the Academic Workforce: A Case Study" School of Business



Pictured above left to right: Oyindamola Dosunmu and Dr. Michael Lohle (Advisor)

Honorable Mention: Sara Palacio and Spiros Katsifis (Poster #22), "The Interaction of Moringa Oleifera with Chromium and the Effect on Chinese Hamster Ovary Cell Toxicity" School of Arts and Sciences





Pictured above left to right: Sara Palacio and Dr. Spiros Katsifis (Advisor)

### Awardees: Doctoral Students

1st Place: Muhammad Wasimuddin Khaled Elleithy, Abdelshakour Abuzneid, Miad Faezipour, Omar Abuzaghleh (Poster #6), "Multiclass ECG Signal Analysis Using Global Average-Based 2-D Convolutional Neural Network Modeling" School of Engineering



Pictured above left to right: Muhammad Wasimuddin, Drs. Khaled Elleithy, Abdelshakour Abuzneid & Miad Faezipour (Advisors)

2<sup>nd</sup> Place: Suparshya Babu Sukhavasi, Susrutha Babu Sukhavasi, Khaled Elleithy, Abdelshakour Abuzneid (Poster #5), "Vital Signs and Organs Related Disease Diagnosis Systems Using CMOS Image Sensors" School of Engineering



Pictured above left to right: Suparshya Babu Sukhavasi, Susrutha Babu Sukhavasi, Drs. Khaled Elleithy & Abdelshakour Abuzneid (Advisors)

**3rd Place: Kathleen Wallace and Nancy DeJarnette** (<u>Poster #1</u>), "edTPA Perspectives: Connecticut's Novice Teachers Reflect" School of Education



Pictured above left to right: Kathleen Wallace and Nancy DeJarnette, Ed.D. (Advisor)

Honorable Mention: Susrutha Babu Sukhavasi Suparshya Babu Sukhavasi, Khaled Elleithy, Abdelshakour Abuzneid (Poster #3), "Role of CMOS Image Sensors Based Surveillance Systems in Demanding Fields" School of Engineering



*Pictured above left to right:* Suparshya Babu Sukhavasi, Susrutha Babu Sukhavasi, Drs. Khaled Elleithy & Abdelshakour Abuzneid (Advisors)

Honorable Mention: Mohamed Mohamed and Khaled Elleithy (Poster # 4), "Safe Shopping Cart" School of Engineering



Pictured above left to right: Mohamed Mohamed and Dr. Khaled Elleithy (Advisor)

Dr. Khaled Elleithy, Interim Dean, College of Engineering, Business, and Education, announced the Faculty Competitive category award of distinction and four honorable mentions.

### Awardees: Faculty Competitive



William Landesman (Poster # 14) "From Microbiomes to Road Kill: What DNA Can Tell Us About the Ecology of Ticks"
School of Arts and Sciences

#### Honorable Mentions:







Miad Faezipour\*, Abdelshakour Abuzneid\*,
Mohammad Aloudat, and Ahmed El-Sayed\*
(Poster #15) "Computer Vision & the Eye: Determining
Intraocular Pressure from Frontal Eye Images"
School of Engineering
\*(Pictured Left)



Nasir Sheikh and Jeffrey London (Poster #16) "Determining Success for African-American Technology Ventures with Agent-Based Modeling" School of Engineering



Mary Warner, Jeanne Alongi, Marti Macchi, Lesley Manson, and Colleen Cordes (Poster #17) "States' Adoption of Evidence-Based Treatment Status for Opioid Use Disorder Varies by Medicaid Expansion" Physician Assistant Institute



**Liane Leedom** (Poster #62) "Turning a Blind Eye: Personality Researchers' Denial of Power Striving"

School of Arts and Sciences

#### Commercialization Posters Awardees

In addition to awarding poster distinctions, FRD 2021 had a NEW category - Greatest Commercial Potential - to award top honors and cash prizes. Thanks to Mike Roer, President of the Entrepreneurship Foundation, six posters teams were invited for afternoon interviews by the Commercialization Judges – Doug Campbell, CEO of The Success Coach SM, Bob Oros, President of Business Development Resources, and Mr. Roer. These judges were looking for poster ideas that have the greatest commercial value from an equity or a licensing standpoint. According to Mr. Roer, this was an exciting opportunity to discover commercial potential among UB's talent. Mr. Roer announced this year's winners.

*License Awardees* were from the School of Engineering - First Place: Miad Faezipour (<u>Poster #15</u>); Second Place: Muhammad Wasimuddin (<u>Poster #6</u>); Third Place: Suparshya Babu Sukhavasi (<u>Poster #5</u>).







Pictured above from left to right: Dr. Miad Faezipour, Muhammad Wasimuddin, Suparshya Babu Sukhavasi

*Equity Awardees* were – first and third place were from the School of Engineering - Tanyaradzwa Matasva (<u>Poster #40</u>) and Mohamed (<u>Poster #4</u>) respectively. Second Place was Savoy Volcy (<u>Poster #55</u>) from the Bridgeport Regional Aquaculture Science and Technology Education Center.







Pictured above from left to right: Tanyaradzwa Matasva, Savoy Volcy Mohamed Mohamed

### **Closing Remarks**

Elena Cahill, J.D., Director of UB's School of Business thanked our sponsors







Martin Resnick '71

Khaled Elleithy, Interim Dean of the College of Engineering, Business, and Education, recognized the FRD Committee, External Judges, UB Faculty & Student Poster Judges, Alumni, UB Departments for their hard work in organizing the annual event over the last two months.

### **UB Faculty Research Day Committee**

Khaled Elleithy, Ph.D., Chair Julie Demers, CRA, Committee Coordinator

Oral Presentation Subcommittee: Maria Gherasimova, Ph.D. (Chair), Nancy DeJarnette, Ed.D., Mark Pitcher, Ph.D.

<u>Poster Subcommittee:</u> Kevin Kelliher, Ph.D. (Chair), Omar Abuzaghleh, Ph.D., Miad Faezipour, Ph.D., Mathew DiMond, D.C., Mark Pitcher, Ph.D., Nasir Sheikh, Ph.D.

## **Technology Subcommittee:**

Marketing & Communications: Miguel Arroyo – Director, Brittany Ladd - Webmaster Poster & Video Platform and Judging App: Trinadh Venna, Zakareya Lasefr, Ph.D.

Tech Support: Kimberly Bender - LIVE Stream Access, Matthew Sherman - UB Scholar Works

Moderators: Elena Cahill, J.D., Michael Lohle, Ph.D.

### **UB Faculty Poster Advisors**

<u>College of Arts & Sciences:</u> Drs. Chunjuan Nancy Wei, David Oberleitner, Donna Demanarig, Kathleen Engelmann, Ryan McCulloch, Spiros Katsifis, & William Landesman

<u>College of Engineering, Business and Education:</u> Drs. Ausif Mahmood, Christian Bach, Jani Pallis, Junling Hus, Khaled Elleithy, Miad Faezipour, Nasir Sheikh, Navarun Gupta, Nuriye Elif Kongar-Bahtiyar, Prabir Patra, Xingguo Xiong, & Zheng Li; Elena Cahill, J.D., Drs. Gew-Rae Kim & Michael Lohle; Andrew Deacon, Nancy DeJarnette, Ed.D., Lori Noto, Ph.D.

College of Health Sciences: Cheryl Lyon, N.D., Kevin Kelliher, Ph.D., Mathew DiMond, D.C.

## **Faculty Competitive Poster External Judges**

Goodwin University: Deanna Akinbajo, PharmD, MPH, Vita Vance, Ph.D.

Independent Program Evaluator: Glen Davenport, Ph.D.

Sacred Heart University: Kevin Bowlyn, Ph.D., Jordan Tewell, Ph.D.

University of Connecticut: Maria Gageonea, Ph.D. University of New Haven: Alexandria Guzmán, Ph.D.

### **Student Poster Judges**

<u>UB Faculty:</u> Omar Abuzaghleh, Ph.D., Patricia Clark, M.S., M.T., S.M (ASCP), Mathew DiMond, D.C., Miad Faezipour, Ph.D., Susan Ferency, M.S., Matthew Funk, D.C., Elif Kongar, Ph.D., Bruce Lorentzen, Marcia Lorentzen, Ed.D., Mark Mattie, M.D., Ph.D., Stephen Perle, D.C., Nasir Sheikh, Ph.D., Prof. Sandra Stramoski, David Terfera, Ph.D.

<u>UB Students:</u> Abdullah Aldwean, Michelle Gadayev, Zachary Nagy, Nadeem Shahid, Luja Shrestha, Suprashya Babu Sukhavasi, Susrutha Babu Sukhavasi, Jun Zhang, Randy Williams

<u>UB Alumni:</u> Mohammed Alyas ('18), Maria Besselink ('19), Akhilesh Borgaonkar ('17), Toufiqur Chowdhury ('15), Marla Kratz ('18), Devon Leighton ('18), Samuel Ojetola ('17), Shrishti Singh ('17), Cura Yuan Zhang ('11)

### **UB** Departments

Jhanay Abrams, Anastasiia Babenko, Christine Hempowicz, Domingos Goncalves, Hawker Khalil Dargallayi, Susan Kristie, Rebecca O'Connell, Pranjal Sanjay, Heather Siemon, Taylor Van Antwerp, Akram York, Eileen Zoppi

### 2021 FACULTY RESEARCH DAY POSTER LIST

Key: FC: Faculty Competitive FNC: Faculty Non-Competitive, D: Doctoral, G: Graduate, UG: Undergraduate, HS: High School

All virtual posters will appear on <u>UB ScholarWorks</u> - 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

SCHOOL OF ENGINEERING				
Poster #	Name	Status	Poster Title	
3	Susrutha Babu Sukhavasi	D	Role of CMOS Image Sensors Based Surveillance Systems in	
			Demanding Fields	
4	Mohamed Mohamed D		Safe Shopping Cart	
5	Suparshya Babu Sukhavasi	D	Vital Signs and Organs Related Disease Diagnosis Systems	
			Using CMOS Image Sensors	
6	Muhammad Wasimuddin	D	Multiclass ECG Signal Analysis Using Global Average- Based 2-D Convolutional Neural Network Modeling	
7	Thomas Arciuolo	D	Implementation and Performance Evaluation of Overlay End	
			System Multicast (ESM) for Stable and Fast Streaming of	
		_	Multimedia Applications over Satellite Networks	
8	Peiqiao Wu	D	Crossbar Architecture for Molecular Electronics	
9	Luja Shrestha	D	System of Equations for Hierarchical Decision Modeling	
10	Abdullah Aldwean	D	Making Primary Healthcare Services Virtual:SWOT Analysis	
11	Feyisetan Dania	D	Blockchain Technology in International Banking: Wire	
			Transfer	
15	Miad Faezipour	FC	Computer Vision and the Eye: Determining Intraocular	
			Pressure from Frontal Eye Images	
16	Nasir Sheikh	FC	Determining Success for African-American Technology	
	16.15	FDIG	Ventures with Agent-Based Modeling	
20	Miad Faezipour	FNC	Detecting Intraocular Pressure Using CNN on Frontal Eye	
21	Mind Engringer	ENIC	Images  ECC Posed Conding Aggregation of Micro provity and High	
21	Miad Faezipour	FNC	ECG-Based Cardiac Assessment for Microgravity and High- Altitude Atmospheres	
28	Abdullah Binsadan	G	Impact of Covid-19 On Business Supply Chain Management	
29	Jhonah-George Felipe	G	Covid-19 Rapid Detection Techniques: Review and	
29	Juonan-George Felipe	U	Perspective	
30	Saurabh Gaikwad	G	Covid-19 - Conspiracy Belief's	
31	Mehernaz Patel	G	Blockchain-Enabled Wills and Testaments: Cryptowills	
			· · ·	
32	Laarni Beciril	G	Implementing Product Diversification Strategies: A Construction Industry Perspective	
33	Taiye Ibiloye	G	Increased Cases of Lung Injury Associated with the Use of	
	Tarye ronoye	0	Electronic Cigarettes Containing Nicotine and Flavoring	
34	Srivatsava Sanapala	G	Future of Trading and Investment Plan: Stocks or	
	Sirrasava Sanapaia		Cryptocurrency?	
36	Sobhanababu Chitrada	G	Decision Making Of Buy Or Rent A House	
63	Sundeep Kumar Singh	G	Healthy Lifestyle Options	
39	Gabriel Ferreira Araujo	UG	Applications of ECG Signal Analysis for R-R Complex	
	Guorier i circiia Araujo		Detection	
			Detterion	
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SCHOOL OF ENGINEERING (Continued)

Poster #	Name Status		Poster Title	
40	Tanyaradzwa Matasva	UG	VICO-Video Conferencing Application	
41	Mohammed Abueissa	UG	Raspberry Pi-Text Recognition Robot	
42	2 Jinsung Lim UG Vaccine Cooler For Developing Countries		Vaccine Cooler For Developing Countries	
43	43 Mohammed Alshatwi UG Pipe Inspection and Corrosion Prevention Rob		Pipe Inspection and Corrosion Prevention Robot	
44	Marc Ventura, Camrin Jones,	UG	Submarine Arm for Explorer	
	Chadwick Jolly			
45	45 Abdullah Alkhaldi UG		2 Axis Solar System	
46	46 Phuong Nguyen, Strina Rai UG		Gun Aid "The First-Aid Gun"	
47	47 Gabrielle Kistner UG AGN Walker Brake System		AGN Walker Brake System	
48	48 Eric Uwayezu UG Comparing Mobile Android and IOS Applications		Comparing Mobile Android and IOS Applications	

## SCHOOL OF BUSINESS

Poster #	Name	Status	Poster Title
18	Gew-Rae Kim	FNC	Behavioral Finance & SNS: GameStop case
19	Congsheng Wu	FNC	Economic Growth and Freedom: A Cross-Country Analysis
26	Oyindamola Dosunmu	G	Perceived Wage Disparity in the Academic Workforce: A Case Study
27	Necas Collins	G	Can a Crowdfunding Platform Help to Rejuvenate the Jamaican Livestock Market While Increasing the Localisation of Their Food Supply Chain?

# SCHOOL OF EDUCATION

Poster #	Name	Status	Poster Title
1	Kathleen Wallace	D	edTPA Perspectives: Connecticut's Novice Teachers Reflect
2	Andrew Deacon	D	Elementary School Leaders' Perspectives on LGBTQ-
			Inclusive Literacy Instruction

## **COLLEGE OF ARTS AND SCIENCES**

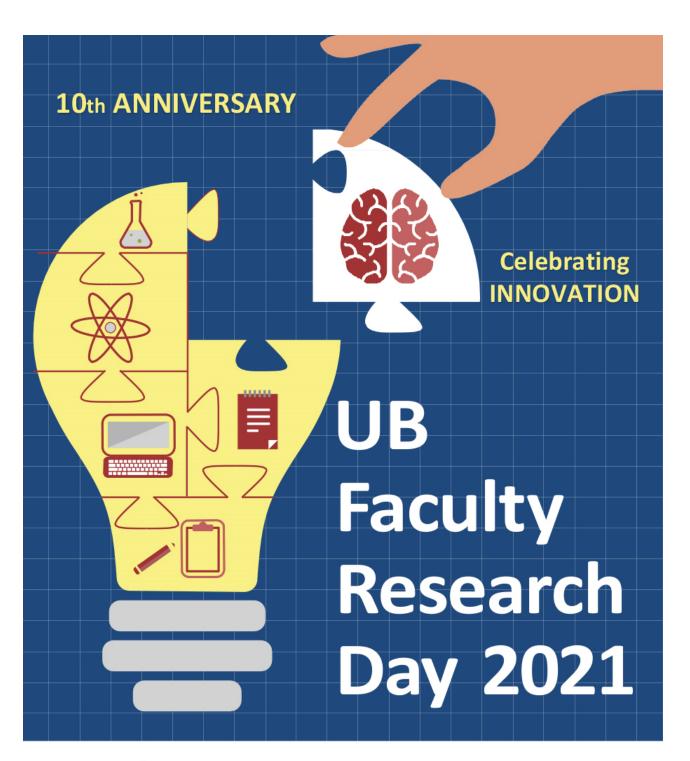
Poster #	Name	Status	Poster Title
14	William Landesman	FC	From Microbiomes to Road Kill: What DNA Can Tell Us
			About the Ecology of Ticks
62	Liane Leedom	FC	Turning a Blind Eye: Personality Researchers' Denial of
			Power Striving
22	Sara Palacio	G	The Interaction of Moringa Oleifera with Chromium and the
			Effect on Chinese Hamster Ovary Cell Toxicity
23	James Durrell	G	Urban Native Flora and Noteworthy Bee Species: Bridgeport,
			CT
24	Amanda Pooter	G	Use of Migdut Dissections and PCR Blockers in the Study of
	Hennemann		the Eukaryotic Microbiome of the Black-Legged Tick
25	Issa Dababneh	G	Galois Theory
37	Muhammad Shoaib Arshad	UG	Lessons in Lawfare: Revisiting the South China Sea Ruling 5
			Years On
38	Jonah Galan	UG	Phenomenological Analysis on First-Generation College
			Students
64	Tamichael Robinson	UG	Marine Debris Effect on Marine Life and Their Habitat

# COLLEGE OF HEALTH SCIENCES

Poster #	Name	Status	Poster Title
	Mckeon Buffamonte, Chris		Chiropractic Management of Atypical Hard Palate Pain: A Case
12	Mattina	D	Report
			Inconsistencies of Spurling's Test in Chiropractic Education: A
13	Vivian Chun	D	Survey Study Design
			States' Adoption of Evidence-Based Treatment Status for Opioid
17	Mary Warner	FC	Use Disorder Varies by Medicaid Expansion
			Effects of DIO2 Thr92Ala SNP on Thyroid Hormonogenesis: A
35	Kathleen Maher	G	Narrative Review of the Literature

# HIGH SCHOOL PARTICIPANTS

Poster #	Name	Poster Title
		Anthropogenic Radiofrequency-Electromagnetic Field Impacts To Nervous System Stability
		Through Neuron Spiking Characterization And Identifying High EMF Zones in the
49	Aki Tsutsumi	Environment
	Sienna	Determining the Efficacy of Zingiber officinale to Promote the Bioremediation of Bioplastics
50	Matregrano	through Amylase Hydrolysis
		Evaluating the Intraspecific and Reciprocal Reaction Within Grouped Learn Shark Behavior
51	Clayton Nyiri	Patterns
52	Dylan Steer	Yielding High Value Secondary Products from Fossil Fuel Waste Utilizing Electrolysis
		Developing an Adhesive Constructed from a Maize-based Matrix Mixed with Chondrus
53	Matthew Duffy	Crispus Carrageenan and Determining its Solubility in Saltwater
	Maria Elena	Investigating the Efficacy of Cannabidiol on the Elongation Time of the Coagulation Cascade
54	Dos Santos	to Mitigate Intravascular Clots
		Utilizing Electromagnetic Pulse Generation to Disrupt the Electron Transport Chain as a
55	Savoy Volcy	Novel Technique to disrupt Harmful Algal Blooms
		Determining the Proliferation of Cellular Oxidative Stress through Blue Light Induced ROS
56	Gabriella Silva	Formation
		Development of a Novel Classification Model to Determine Vegetation Habitability of
	Joseph	Exoplanet Atmospheres Via Random Forest
57	Gottlieb	Machine Learning Algorithms
	Alexander	
58	Vassallo	Harnessing Bio-Kinetic Energy Through A Wearable Non-Invasive Generator
	Naydelin	
	Rosas, Lizbeth	
59	Francisco	The Benefits of Consuming Breakfast for Adolescents
	Shahmima	
60	Akther	A Natural Remedy To Decrease Asthma
	Moeen	
61	Khawaja	Stopping Air Pollution Through Different Methods of Persuasion



Friday
April 9
2021

9 AM to 4 PM



Since its revival as an annual event in 2011, UB Faculty Research Day has become the premier academic event on campus, providing a venue at which the diverse array of research undertaken by faculty and assisted by students is showcased. The goal of the event is to foster project collaborations between departments, schools, and colleges as research become increasingly interdisciplinary.

UB Faculty Research Day provides a place and time to show the results of faculty and student research from the past academic year. It is also an opportunity to share innovative ideas. Faculty and student collaborators are encouraged to submit posters highlighting completed and ongoing research projects. This year, as in the past, awards will be given to the best faculty, graduate, and undergraduate posters.

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