

# MUSE 2022 Poster Session

Poster #	School	Department	Student Presenters	Poster Title	Faculty Mentors	Poster #	School	Department	Student Presenters	Poster Title	Faculty Mentors
1	The Arts and Communication	Art and Art History	Brianna Titus, Liz Stahl	Paper Making & Still Frame Animation	Dr. Elizabeth Mackie	35	Science	Biology	Robby King, Siya Kakumanu	Comparing patterns of herbivory across native and invasive regions of four species of Lonicera (Caprifoliaceae) using herbarium specimens	Dr. Wendy Clement
2	The Arts and Communication	Design and Creative Technology	Faith Christian	Project and Learning Plan for Visualizing Across Boundaries	Dr. Kim Pearson	36	Science	Biology	Raegan Gautam, Kirthana Krishnamurthy, Phylicia Menendez, Angela Mo	Exploring Marine Invertebrate Biomineralization	Dr. Gary Dickinson
3	The Arts and Communication; Humanities and Social Sciences	Music; English	Cesar Gonzalez	Teaching the Intersectionality of Race, Class and Gender: Hip Hop in the Secondary Music Education Classroom	Dr. Lisa Ortiz	37	Science	Biology	Emily Behnke, Omar Halim, Sean Siniscalco	Investigation of the Impacts of YqgF on Ribosomal RNA and Temperature Sensitivity	Dr. Kathryn Elliott
4	Education	Elementary and Early Childhood Education	Rachel Lee	Voices of Asian American Teachers	Dr. MinSoo Kim-Bossard	38	Science	Biology	Audrey Riccitelli	A Novel Connection Between [PSI+] Prion Formation and RNA Splicing in <i>S. cerevisiae</i>	Dr. Tracy Kress
5	Education	Special Education, Language, and Literacy	Teresa Folan	Culturally cognizant literacy education: Linguistic and cultural diversity as a classroom resource	Dr. David Bwire	39	Science	Biology	Luctamuelle L. Joseph, Kiandry Minaya, Rachel Lea	Untangling Gene Expression Changes in Crabs in Response to Environmental Salinity Change	Dr. Donald Lovett
6	Engineering	Biomedical Engineering	Amanda Dias, Sebastian Winter	Arduino Based Handheld Surface Electromyography Fatigue Device	Dr. Brett BuSha	40	Science	Biology	Kruti Patel	Analyzing Lox4 Levels in Jasmonic Acid Signaling Cascade in <i>Zea Mays</i>	Dr. Melkamu Woldemariam
7	Engineering	Biomedical Engineering	Jessica Longstreth	Vacuum Sealed Parallel Plate Flow Chamber for Confocal Visualization of Thrombus Formation	Dr. Constance Hall	41	Science	Biology	Ryan Pagnillo	An Examination of Allene Oxide Cyclase (AOC) in Jasmonate-Mediated Defense Signaling	Dr. Melkamu Woldemariam
8	Engineering	Biomedical Engineering	Alexandra Stibler	Bone Mechanical Property Changes in Rats Exposed to Galactic Cosmic Radiation	Dr. Anthony Lau	42	Science	Biology	Sathya Rameshkumar, Neel Patel	Can Individual Responses to Environmental Variation Contribute to the Formation of New Species?	Dr. Matthew Wund
9	Engineering	Biomedical Engineering	Nicholas J. Cavallero	Analysis of the Microstructure of Bone Affected by Galactic Cosmic Radiation	Dr. Anthony Lau	43	Science	Chemistry	Iknoor Grewal, Ifrah Malik	Studying the Biophysical Differences Between Mutants of <i>Escherichia coli</i> CFA/I Pili	Dr. Joseph Baker
10	Engineering	Civil Engineering	Alexa Karpus, Chris Strain, David Cardenas	Characterizing Rural Route Congestion During a Major Storm Event	Dr. Thomas Brennan	44	Science	Chemistry	Vani Lorish, Cassandra A. McDermott	Investigating the Impact of Alanine Mutations on the Strength and Stability of the <i>E. coli</i> CS20 Pilus	Dr. Joseph Baker
11	Engineering	Electrical and Computer Engineering	Benjamin Winkler	5G Microstrip Antenna at Millimeter Band Frequencies	Dr. Mahrukh Khan	45	Science	Chemistry	Zachary Alseika	Probing the strength and stability of wild type and mutated <i>N. gonorrhoeae</i> type IV pili	Dr. Joseph Baker
12	Engineering	Electrical and Computer Engineering	Nick Alvear	Ultra Wide Band Cavity Backed Antenna	Dr. Mahrukh Khan	46	Science	Chemistry	Justin Martinez, Cris Herrera Alpizar, Sri Manyata Peddinti	Optimizing MALDI TOF MS Ion Intensity by Matrix Selection and Sample Deposition	Dr. Levi Ekanger
13	Engineering	Electrical and Computer Engineering	Talha Murad	Miniaturized Microstrip Patch Antennas for IoT Applications	Dr. Mahrukh Khan	47	Science	Chemistry	Sri Manyata Peddinti, Justin Martinez, Cristian Herrera Alpizar	The Diron Center of YtFe is Sensitive to In Situ Degradation in MALDI TOF MS	Dr. Levi Ekanger
14	Engineering	Electrical and Computer Engineering	John Marble, Shawn Kushner	Optimal Gameplay Decision Making and Emotion Classification for Humanoid Robots with Petri Nets	Dr. Seung-yun Kim	48	Science	Chemistry	Beth Singer, Meghna Harinath	Virus-inspired transfection of a marine alga: Isolation of EhV-207 viral envelope	Dr. Donald Hirsh
15	Engineering	Electrical and Computer Engineering	Samantha Potomic, Rebecca Kimmick	Standing and Kicking Optimization by Improving Stability	Dr. Seung-yun Kim	49	Science	Chemistry	Samielle Taylor	Formulation of Virus-Inspired Transfection Vehicle for Marine Algae <i>E. huxleyi</i>	Dr. Donald Hirsh
16	Engineering	Electrical and Computer Engineering	Michael Franco-Garcia, Evan Leopold	Visualization and Edge Computing for Deep Learning	Dr. Larry Pearlstein	50	Science	Chemistry	Angela Thomas	Method Development for GC/MS analysis of nicotine and metabolites in plasma	Dr. Rebecca Hunter
17	Engineering	Integrative STEM Education	Druscilla Kojiem	A Data Visualization Experience for Preservice Teachers (ADVizE): Analyzing Undergraduate Data	Dr. Melissa Zrada	51	Science	Chemistry	Nikolas Romano	Conductive Polymer-Modified Electrodes as Bioanalytical Sensors	Dr. Rebecca Hunter
18	Engineering	Mechanical Engineering	Haris Alam, Thomas Romeu, Anthony Russo	Drone MUSE 2022	Dr. Mohammed Alabsi	52	Science	Chemistry	Alyssa Minnella, Saimanish Dhulipala, Mubarak Rawe,	[PNP] Metal Complexes for CO2 Functionalization	Dr. Abby O'Connor
19	Humanities and Social Sciences	African American Studies & Criminology	Angie Tamayo Leon, Irvin Echeverria	Examining Perspectives of Returning Citizens Navigating Life After Prison	Dr. Michael Mitchell	53	Science	Chemistry	Angelica Bolon, Yaa Serwaa Awuah	[NNN] Pincer Complexes for Hydrogenolysis of Polyolefins	Dr. Abby O'Connor
20	Humanities and Social Sciences	Psychology	Samridhi Sawhney	The neural measures of fluency and disfluency during recognition memory using event-related potentials	Dr. Andrew Leynes	54	Science	Chemistry	Tanay Parnaik, Saptarshi Dutta	Synthesis and Electrochemical Studies of Diarylamines	Dr. Giovanni Parada
21	Humanities and Social Sciences	Psychology	Ellie Kerhin	Different Than Expected: The Transition From Infertility to Motherhood	Dr. Jessica Barnack-Tavlaris	55	Science	Computer Science	Robert Helck	Forecasting Performance of Natural Language Processing Systems During Active Learning	Dr. Michael Bloodgood
22	Humanities and Social Sciences	Sociology and Anthropology	Jordan Ekstrom, Cameron Keating	Justice and Blameworthiness: Gender Disparities in the Criminalization of Hot Car Deaths	Dr. Elizabeth Borland	56	Science	Computer Science	Yehuda Binik, Faiza Hoque	Targeted Cost Effective Protein Variant Library Design	Dr. Dimitris Papamichail
23	Nursing and Health Sciences	Nursing	Tamara Rene, Starlin Regalado Nunez	Psychosocial and Physiologic Determinants of Depressed Mood in Low-Income and Ethnic Minority Mothers	Dr. Rahshida Atkins	57	Science	Computer Science	Elliot Topper, Paula Arroyave, Andrew Michael	Toward Understanding of Virtual Reality Sickness in Children	Dr. Sharif Mohammad Shahnewaz Ferdous
24	Nursing and Health Sciences	Nursing	Tamara Rene, Starlin Regalado Nunez	Enhancing the Educational Experience for Marginalized Populations: Assessing the Climate of Inclusivity and Acceptance of Diversity in Health Education	Dr. Rahshida Atkins	58	Science	Mathematics and Statistics	Anna Dorval	A Polynomial Chaos Approach to Predicting Swimming Performance	Dr. Nicholas Battista
25	Nursing and Health Sciences	Nursing	Mery Cardoso, Abbie Lyles	Integrating the Concepts of Diversity, Equity, and Inclusion into the Nursing	Dr. Katie Hooven	59	Science	Physics	Pierce Wickenden	Further Analysis of the Triskyrmion	Dr. Daniel Capic
26	Nursing and Health Sciences	Nursing	Sarah Curtis	Sibling Adjustment to Diabetes and Educational Needs	Dr. Tami Jakubowski	60	Science	Physics	Louis Miller	Finding X-ray Emission from Shocked Post-Starburst Galaxies	Dr. Lauranne Lanz
27	Nursing and Health Sciences	Nursing	Sofia Abbruzzesi, Melissa Casper	Nurse Knowledge of Autism and Aging	Dr. Constance Kartoz	61	Science	Physics	Amanda Graessle	Searching for Active Supermassive Black Holes in Shocked Post-Starburst Galaxies with Ultraviolet Infrared Spectral Energy Distributions	Dr. Lauranne Lanz
28	Nursing and Health Sciences	Nursing	Sofia Abbruzzesi, Melissa Casper	Osteoporosis Prevention in Adults with Autism: Is Calcium and Vitamin D Intake Adequate?	Dr. Constance Kartoz	62	Science	Physics	Dean Klunk	Poster title: Testing Forward Modeling of X-ray Observations	Dr. Lauranne Lanz
29	Nursing and Health Sciences	Nursing	Morgan Vacarro	Escape from Nursing 220: A Competency-Based Pedagogical Approach Aimed at Preparing Nursing Students for the Next-Generation NCLEX Exam.	Dr. Tracy Perron	63	Science	Physics	Ashley N. Fernandez	Kepler-80	Dr. Mariah MacDonald
30	Nursing and Health Sciences	Public Health	Nikhil Parab, Anthony Cuccurullo	Optimizing DNA Extraction from the Protozoan <i>Cryptosporidium</i> in Fecal, Surface Water, and Tap Water Samples	Dr. Alexis Mraz	64	Science	Physics	Michael Pedowitz	Constraining the Long-Term Stability and Habitability of Circumbinary Planets	Dr. Mariah MacDonald
31	Nursing and Health Sciences	Public Health	Kelly Maneri	Health Education as A Strategy to Enhance the Quality of Life of Older Adults, Their Families and Caregivers Affected by Covid-19 in Mercer County	Dr. Marina de Souza	65	Science	Physics	Michael Polania	Life on a Planet with a Black Hole Sun	Dr. Mariah MacDonald
32	Science	Biology	Ellie Kreider, Shreya Ranadive, MaryAngela Senter	Examining the role of CYP72 enzymes in maize and Arabidopsis biochemical and growth responses to environmental stress	Dr. Lecann Thornton	66	Science	Physics	Skylar D'Angiolillo	Constraining the Mass of Exoplanetary System Kepler-305	Dr. Mariah MacDonald
33	Science	Biology	Isaac Gutierrez	Validating hormone-concentration estimates in the blood plasma of a songbird	Dr. Luke Butler	67	Science	Physics	Aniello Sabatino	Examining Perceptions of Physics Among High School Students	Dr. AJ Richards
34	Science	Biology	Anna Bergen	A Study of Floral Evolution in Lonicera (Caprifoliaceae) While Looking Through an Interactive Lens	Dr. Wendy Clement						