

# MUSE 2024 Poster Session

#	School	Department	Student Presenters	Poster Title	Faculty Mentors	#	School	Department	Student Presenters	Poster Title	Faculty Mentors
1	Business	Economics	Shannon Stix, Ryan Thalwitzer	The COVID-19 Pandemic and Mental Health: An Analysis of Mental Health by Income and Religion	Donka Brodersen	30	Science	Biology	Nancy Dominguez, Sophy Vuong	Using a bacterial two-hybrid system to investigate the role of yqgF in 16S rRNA processing	Kathryn Elliott
2	Education	Elementary and Early Childhood Education	Benjamin Lieberman, Madeline Reynolds	Investigating Early Childhood Teachers' Notions of Play Through Map Construction	Jody Eberly, Arti Joshi	31	Science	Biology	Genis Espinal, Matthew Tsodikov	Effects of ccpp-1 mutations on brood size in c. Elegans	Nina Peel
3	Education	Special Education, Language and Literacy	Lisa Falvey, Christian Perez	Why First-Generation College Students Choose to Pursue Majors in Education	Nadya Pancsofar	32	Science	Chemistry	Akshita Anupam	Don't be so stiff: The role of histatin-5 in CS20 pilus dynamics	Joseph Baker
4	Education / Engineering	Integrative STEM Education	Olivia Formoso, Emma Harbison	A Data Visualization Experience for Preservice Teachers	Melissa Zrada	33	Science	Chemistry	Iknoor Grewal	A Dance of Two Pili: Characterizing features of the binding interface between Histatin-5 and the CS20 pilus	Joseph Baker
5	Engineering	Biomedical Engineering	Stephanie Frolio, Dale Johnson, Michelle N. Meyers, Panagjota Perdakis, Alexandra K. Stibler	Bone Material Property Changes in Rats Exposed to Proton Radiation	Anthony Lau	34	Science	Chemistry	Rocky Lu	G6Martini with a Twist: Coarse-Grained Modeling of Adhesion Pili	Joseph Baker
						35	Science	Chemistry	Kiara Robles	Unlocking the secrets of interstellar hitchhikers: The F-Ena pilus enables spore-forming bacteria adhesion	Joseph Baker
6	Engineering	Biomedical Engineering	Jeremy Liegner	Effects of Continuous, Low Dose-Rate Neutron Radiation Exposure on Maternal Bone Microstructure During Pregnancy	Anthony Lau	36	Science	Chemistry	Nicole Rojas	Relax! Exploring Bacterial Pilus Resistance to Stressors	Joseph Baker
7	Engineering	Biomedical Engineering	Sathya Kummarapurugu	Development of an Educational Tool Simulating Excitable Nerve Cells	Xuefeng Wei	37	Science	Chemistry	Makenna Heslin, Marianna Medina	Thyl radical detection in ADO model system	Levi Ekanger
8	Engineering	Civil Engineering	Alexia Watson	Implementation Performance Metrics for Converting Signalized Arterial Roadways into Human Centric Transportation Systems	Thomas Brennan	38	Science	Chemistry	Katie Chan, Sydney Crawbuck	MICRO CURE: Method Development of Microfluidic Devices for Analytical Chemistry Courses	Rebecca Hunter
9	Engineering	Electrical and Computer Engineering	Toluwanimi Akinosho	Design and Simulate Organic Thin-Film Transistor and Diode	Wudyalew Wondmagegn	39	Science	Chemistry	Kimberly Liu	Optimizing Conductive Polymer Nanofibers for Biological Sensing Applications	Rebecca Hunter
10	Engineering	Electrical and Computer Engineering	Cheyenne Torraca	Research Project: Modeling the TCNJ Power Grid for Advanced Optimization and Maximization of Renewability	Anthony Deese	40	Science	Chemistry	Nikolas Romano	Optimization of Polymer-Modified Electrodes with Streamlined Data Analysis Using Python	Rebecca Hunter
11	Engineering	Integrative STEM Education	Shayaan Makki, Sahir Tehseen	Studying the effect of Vertical Green Walls on the Thermal Regulation of TCNJ Dorms	Manuel Figueroa	41	Science	Chemistry	Joaquin Howard	First Things First: Synthesis and Spectroscopic Analysis for PCET Studies	Giovanny Parada
12	Engineering	Mechanical Engineering	Leah Sklar	Solar-Powered Frost Prevention Device	Ardeshir Bangian Tabrizi	42	Science	Chemistry	Ashley Rettino, Jack Tinkelenberg	Watts Next? Studying Electrochemical Reactions of C-Centered Radicals for Sustainable Energy	Giovanny Parada
13	Engineering	Mechanical Engineering	Nathan Inyang, Panayiotis Papamichail, Karen Yan	Optimizing encapsulation process of PDMS Microfluidic Devices	Karen Yan	43	Science	Chemistry	Sean Sprague	Achieving PCET of Ruthenium Complex's Using Chemical Reagents	Giovanny Parada
14	Humanities and Social Sciences	African American Studies	Kaitlyn Yetman	Myrtle Williams' 'Unsung Harlem Renaissance Heroines	Kendrix Williams	44	Science	Computer Science	Demetri Bichara, Vijay Manchiraju	User-Adjustable Stopping of Active Learning	Michael Bloodgood
15	Humanities and Social Sciences	African American Studies	Zenaiya Burgess	The African Goddess	Piper Williams	45	Science	Computer Science	Elias Ananiadis	Measuring Cybersickness with EEG	Sharif Shahnewaz Ferdous
16	Humanities and Social Sciences	Anthropology / World Languages and Cultures	James Pan	Building student awareness of "culture" through digital ethnography in beginning-level Japanese courses	Holly Didi-Ogren	46	Science	Physics	Christopher Baker, Nicholas Calabrese	Nanoparticle Motion in Ionic Liquids Under the Scanning Electron Microscope	Angela Capece
17	Humanities and Social Sciences	History	Anthony Lepore	Fly Among Friends? Race, Nation, and Africanization at East African Airways, 1964-1976	Matthew Bender	47	Science	Physics	Anna Cook, Emily Harms, Jon Spricigo	Nanoparticle Synthesis in Ionic Liquids using a Plasma Source	Angela Capece
18	Humanities and Social Sciences	Political Science	Sydney Eltringham, Emma Smith	Natural Disasters or Entrepreneurs: An Analysis of the 117th Congress	Cadence Willse	48	Science	Physics	Grace Hamburg	Study of sand dune movement and migration along the south jersey coast	Shannon Graham
19	Humanities and Social Sciences	Psychology	Chloe Yadav	An Examination of Victim Blaming and Self-Blame as Predictors of Severe PTSD Symptoms Following Tonic Immobility During Campus Sexual Assault	Joanna Herres	49	Science	Physics	Joe Petrecca	An analysis of the spatial-temporal relationships between Slow Slip Events and Megathrust Earthquakes	Shannon Graham
20	Humanities and Social Sciences	Psychology	Jules Boyle	Trends in Global Psychological Science: How W.E.I.R.D. Is the Journal of Happiness Studies?	June Kim	50	Science	Physics	Vincent Territo	Fainter, Fuller, Faster: Expanding Detections with TCNJ's Telescope	Lauranne Lanz
21	Humanities and Social Sciences	Women's, Gender, and Sexuality Studies	Madison Cavallo, Stephanie Martinez	WGSS Archives Project: Archiving Women's, Gender, and Sexuality Studies at TCNJ	Marla Jaksch	51	Science	Physics	Logan Bennett	Developing a Proxy for Active Tectonic Plates on Exoplanets	Mariah MacDonald
22	Nursing and Health Sciences	Nursing	Aliyah Beckford, Kelly Quinn	Cultivating Community Collaborations for Diverse Populations: Ongoing Strategies to Sustain Academic-Community Partnerships for the Next Generation of Civically Engaged Nursing Students who Service Children with Disabilities	Rahshida Atkins, Chelsea Lebo	52	Science	Physics	Daniel Patterson	Tracing exoplanet resonant chains through three formation methods	Mariah MacDonald
						53	Science	Physics	Jake Sendao	Kepler-55 is a Very Bizzare Planetary System: A Thorough Analysis Using Python	Mariah MacDonald
23	Nursing and Health Sciences	Nursing	Aliyah Beckford, Kelly Quinn	Nursing Student's Perspectives of Civic Engagement with Diverse Populations: Evaluating the Impact of Intervention Modifications: Developing and Implementing Orientation Materials for Enhanced Interaction with Children Who Have Disabilities	Rahshida Atkins, Chelsea Lebo	54	Science	Physics	Mikayla Angelini, Sam Ehret, Hector Arroyo Quintana	Mapping the Trenton Urban Heat Island	Nathan Magee
						55	Science	Computer Science	Nate Sorvino	Carapics: An Integrated System for Biological Annotation Database	Sejong Yoon
24	Nursing and Health Sciences	Nursing	Vicki Brzoza, Elyse Ryan	Beyond the Horizon: Restructuring Breast Cancer Education and Screening for A Healthier Tomorrow	Vicki Brzoza	56	Arts and Communication	Design and Creative Technology	Olivia Stark, Sammie Zhu	Visualization of Microbiological Phenomena in Dental Hygiene Education	Sorraya Brashear-Evans
25	Nursing and Health Sciences	Nursing	Emma Carnick, Simranjot Mann	From Heart to Sole: Examining the Association Between V-Shaped Foot Crease & Congenital Heart Disease	Tami Jakubowski						
26	Nursing and Health Sciences	Nursing	Julianna Powell, Romy Zemer	Building Competence in Student Nurses through a Communication Tool	Tracy Perron						
27	Nursing and Health Sciences	Public Health	Amrutha Banda, Kirhana Krishnamurthy, Vinisha Patel	Investigating the Impact of Biofilm Characteristics and Water Quality on Legionella pneumophila Growth	Alexis Mraz						
28	Science	Biology	Isra Ahmad, Corin Hoppe, Sameer Kamal	Exploring Marine Invertebrate Shell Formation	Gary Dickinson						
29	Science	Biology	Gianluca Maar	CYP72A353 Regulates Corn Environmental Stress Response	Leeann Thornton						