MUSE 2022 Poster Session

Poster #

Faculty Mentors

Dr. Elizabeth Mackie

Dr. Kim Pearson

School

Science

Science

Student Presenters

Robby King,

Siya Kakumanu

Raegan Gautam,

Phylicia Menendez,

Angela Mo

Emily Behnke,

Omar Halim,

Sean Siniscalco

Tanay Parnaik,

Saptarshi Dutta

Robert Helck

Yehuda Binik,

Faiza Hoque

Elliot Topper,

Paula Arroyave,

Anna Dorval

Pierce Wickenden

Louis Miller

Amanda Graessle

Dean Klunk

Ashley N. Fernandez

Michael Pedowitz

Michael Polania

Skylar D'Angiolillo

Aniello Sabatino

Andrew Michael

Chemistry

Computer Science

Computer Science

Computer Science

Mathematics and

Statistics

Physics

Physics

Physics

Physics

Physics

Physics

Physics

Physics

Physics

Science

65

Synthesis and Electrochemical Studies of Diarylamines

Forecasting Performance of Natural Language Processing

Targeted Cost Effective Protein Variant Library Design

A Polynomial Chaos Approach to Predicting

Further Analysis of the Triskyrmion

Swimming Performance

Energy Distributions

Kepler-80

Circumbinary Planets

High School Students

Life on a Planet with a Black Hole Sun

Examining Perceptions of Physics Among

Toward Understanding of Virtual Reality Sickness in Children

Searching for Active Supermassive Black Holes in Shocked

Post-Starburst Galaxies with Ultraviolet Infrared Spectral

Constraining the Long-Term Stability and Habitability of

Constraining the Mass of Exoplanetary System Kepler-305

Finding X-ray Emission from Shocked Post-Starburst Galaxies Dr. Lauranne Lanz

Poster title: Testing Forward Modeling of X-ray Observations Dr. Lauranne Lanz

Systems During Active Learning

Dr. Giovanny Parada

Dr. Michael Bloodgood

Dr. Dimitris Papamichail

Dr. Sharif Mohammad

Shahnewaz Ferdous

Dr. Nicholas Battista

Dr. Daniel Capic

Dr. Lauranne Lanz

Dr. Mariah MacDonald

Dr. Mariah MacDonald

Dr. Mariah MacDonald

Dr. Mariah MacDonald

Dr. AJ Richards

Kirthana Krishnamurthy,

Department

Biology

Biology

Biology

Poster Title

Comparing patterns of herbivory across native and invasive

Investigation of the Impacts of YqgF on Ribosomal RNA and

regions of four species of Lonicera (Caprifoliaceae) using

Exploring Marine Invertebrate Biomineralization

herbarium specimens

Temperature Sensitivity

Faculty Mentors

Dr. Wendy Clement

Dr. Gary Dickinson

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 S. cerevisiae	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 Zea Mays	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 Escherichia coli 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. McDermor	Investigating the Impact of Alanine Mutations on the Strength and Stability of the E. coli 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 N. gonorrhoeae 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 Diiron 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 E. huxleyi	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

Dr. Andrew Leynes

Dr. Jessica Barnack-

Dr. Elizabeth Borland

Dr. Rahshida Atkins

Dr. Katie Hooven

Dr. Tami Jakubowski

Dr. Constance Kartoz

Dr. Constance Kartoz

Dr. Tracy Perron

Dr. Alexis Mraz

Dr. Marina de Souza

Dr. Leeann Thornton

Dr. Luke Butler

Dr. Wendy Clement

Tavlaris

Communication; Teaching the Intersectionality of Race, Class and Gender: Music; English Cesar Gonzalez Dr. Lisa Ortiz Science Hip Hop in the Secondary Music Education Classroom Humanities and Social Sciences

Student Presenters

Brianna Titus,

Faith Christian

Liz Stahl

Poster Title

Project and Learning Plan for Visualizing Across Boundaries

The neural measures of fluency and disfluency during

recognition memory using event-related potentials

Different Than Expected: The Transition From

in Low-Income and Ethnic Minority Mothers

Acceptance of Diversity in Health Education

Integrating the Concepts of Diversity, Equity,

and Inclusion into the Nursing

Nurse Knowledge of Autism and Aging

and Vitamin D Intake Adequate?

Next-Generation NCLEX Exam.

Covid-19 in Mercer County

environmental stress

plasma of a songbird

Samples

Justice and Blameworthiness: Gender Disparities in the

Enhancing the Educational Experience for Marginalized

Populations: Assessing the Climate of Inclusivity and

Sibling Adjustment to Diabetes and Educational Needs

Osteoporosis Prevention in Adults with Autism: Is Calcium

Escape from Nursing 220: A Competency-Based Pedagogical

Cryptosporidium in Fecal, Surface Water, and Tap Water

Health Education as A Strategy to Enhance the Quality of Life

of Older Adults, Their Families and Caregivers Affected by

Validating hormone-concentration estimates in the blood

A Study of Floral Evolution in Lonicera (Caprifoliaceae)

While Looking Through an Interactive Lens

Examining the role of CYP72 enzymes in maize and

Arabidopsis biochemical and growth responses to

Approach Aimed at Preparing Nursing Students for the

Optimizing DNA Extraction from the Protozoan

Psychosocial and Physiologic Determinants of Depressed Mood Dr. Rahshida Atkins

Infertility to Motherhood

Criminalization of Hot Car Deaths

Samridhi Sawhney

Ellie Kerhin

Jordan Ekstrom,

Tamara Rene,

Tamara Rene,

Mery Cardoso,

Abbie Lyles

Sarah Curtis

Sofia Abbruzzesi,

Melissa Casper

Sofia Abbruzzesi,

Melissa Casper

Morgan Vacarro

Nikhil Parab,

Kelly Maneri

Ellie Kreider,

Shreya Ranadive,

Isaac Gutierrez

Anna Bergen

MaryAngela Senter

Anthony Cuccurullo

Starlin Regalado Nunez

Starlin Regalado Nunez

Cameron Keating

Paper Making & Still Frame Animation

School

The Arts and

The Arts and

The Arts and

Humanities and

Humanities and

Humanities and

Social Sciences

Nursing and

Science

Science

Science

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Health Sciences

Social Sciences

Social Sciences

Psychology

Psychology

Sociology and

Anthropology

Nursing

Nursing

Nursing

Nursing

Nursing

Nursing

Nursing

Public Health

Public Health

Biology

Biology

Biology

Communication

Communication

Department

Art and Art History

Design and Creative

Technology

Poster #