

## Schedule

### Research and Creative Achievement Week (RCAW) 2023

Monday, April 3, 2023 | Undergraduate Students Day

#### Undergraduate Podium Presentations

##### MCSC 200 | Biomedical Sciences

9:00 AM - 10:15 AM

- UPM01 9:00-9:15 Characterizing the Subcellular Localization and Function of Citron Kinase in the Germline of *Drosophila melanogaster*, Kyra Porter
- UPM02 9:15-9:30 FbpA and FbpC from the Louse-Borne Relapsing Fever Spirochete, *Borrelia Recurrentis*, Bind Human C1r and Inhibit Complement Activation, Anna Schulz
- UPM03 9:30-9:45 Fluorescence-Activated Cell Sorting Validation of Cell Specific Recombination in Novel Mouse Model, Ananya Pentakota
- UPM04 9:45-10:00 Investigating the Role of *Coding Gene 8093* in the Germline Stem Cells, Michael Cavallero
- UPM05 10:00-10:15 Vitamin B12 Regulates Long Chain Fatty Acid Synthesis in Macrophages: Implications for Age- Related Inflammatory Disease Intervention, Abigail Dickerson

Moderator: Taylor Kinney

Judge: Morgan Milton

##### MCSC 249 | Engineering, Technology, and Computer Science

9:30 AM – 11:00 AM

- UPM06 9:30-9:45 Assessing Cloud Coverage with MATLAB Segmentation, Hannah Blackburn
- UPM07 9:45-10:00 Sensor Integration Platform for Older Adults, Braxton Chambers
- UPM08 10:00-10:15 Characterizing Vegetation by Surface Geometry Through LIDAR, Kyle Kirian
- UPM09 10:15-10:30 Application of DFAM in Eastern North Carolina, Micah Gruninger
- UPM10 10:30-10:45 Real-Time Alerting for Advanced IoT Management and Deployment, Braxton Chambers
- UPM11 10:45-11:00 Design for Additive Manufacturing Applications in Eastern North Carolina, Arlenis Santos

Moderator: Kaitlin Southern

Judge: Colleen Janeiro

##### MCSC 253 | Human Health

10:00 AM - 11:00 AM

- UPM12 10:00-10:15 Greek Life and Overdose Education, Jackson Cheek
- UPM13 10:15-10:30 Secondhand Electronic Cigarette Aerosol in Vehicles Impacts Indoor Air Quality, Luke Thomas & Alex Tiet
- UPM14 10:30-10:45 Project MOMS: Mothers, Movement, and Maternal Health Care Providers Study, Abigail Ulffers

UPM15 10:45-11:00 Can Trauma be an Opportunity to Identify and Treat Non-Injury Medical Conditions in Young Adults?,  
Jackson Cheek

Moderator: Everett Minchew

Judge: Brandon Stroud

**MCSC 200 | Diversity, Equity, and Inclusion, Education, Social Sciences**

**1:00 PM - 3:30 PM**

UPM16 1:00-1:15 The Impact of Islamophobia and Social Media on Muslim American Students' Mental Health in School Settings in North Carolina, Noorhan Abu Khalaf

UPM17 1:15-1:30 Body Positivity Influencers: Their Values, Impact on Retailers, and College Student's Opinions, Jenna Scott

UPM18 1:30-1:45 Use of Modular Therapy to Treat Anxiety for School Age Students with Autism, Madison Bille

UPM19 1:45-2:00 Did Policing of Immigration Change During the Trump Administration?, Nitika Jane

UPM20 2:00-2:15 Diving Into the Realm of Politics, Braddock Rhodenhiser

**2:15-2:30 BREAK**

UPM21 2:30-2:45 School-Based Programs that Address the Social Emotional Learning Needs of Traumatized Children, Samantha Brenz

UPM22 2:45-3:00 Healing from Racial Trauma: Identity Affirmation, Self-Awareness/Reflection, and Problem-Focused Coping, George Cherry

UPM23 3:00-3:15 Don't Sit So Close to Me!: Life History, Disease Salience, and the Behavioral Immune System, Emily Lagnese

UPM24 3:15-3:30 The Effects of a Growth Mindset Intervention on Stereotype Threat of First Generation College Students, Gibely Cisneros-Estrada

Moderator: Babatunde Falohun

Judge: Sydney Wilson

**MCSC 249 | Fine Arts, Humanities, Visual Art and Design**

**1:30 PM - 3:45 PM**

UPM25 1:30-1:45 The Connection Between Family: A Representation of Generational Love and Strength Between Women, Lorah Currin

UPM26 1:45-2:00 The Development of Young Adult Committed Dating Relationships, Apoorva Mutyala

UPM27 2:00-2:15 Supportive School Administrative Leadership Practices for Beginning Teachers Retention, Emily Bronson

UPM28 2:15-2:30 Tolkien's Long Defeat and Final Victory: The Christian Triumph of King Théoden in The Lord of the Rings, Arthur Schupbach

**2:30-2:45 BREAK**

UPM29 2:45-3:00 Adapting Puddleglum: An Exploration of Artistic Liberty, Samuel Lanier

UPM30 3:00-3:15 Nefertiti, Hypatia, and Sappho: Reception History and Women in the Ancient Mediterranean, Anna Roche

UPM31 3:15-3:30 Carnatic and Western Post-Tonal Fusion: Asha Srinivasan's Exploration into Combining Western Post-Tonal Music and Carnatic Classical Music, Ella Green

UPM32 3:30-3:45 My Great Expectations: A Personal Narrative Portfolio, Olivia Warren

Moderator: Seo Eo  
Judge: Bethany Martin

### MCSC 253 | Natural Sciences

2:00 PM - 4:00 PM

UPM33 2:00-2:15 Silicon DiOxide is the Most Abundant Mineral in the Earth's Crust: How Toxic is It?, Ankita Prakash

UPM34 2:15-2:30 Investigating the Seed Bank of a Wetland Plant Community in a Long-Term Mowing and Fertilization Experiment, Peyton Harrelson

UPM35 2:30-2:45 Identifying Cu<sup>2+</sup> Binding to a Novel Cupredoxin from *Brucella abortus*, Alexa Kerkan

UPM36 2:45-3:00 Quantum Tunneling in AtLOX1, Savannah Swink

### 3:00-3:15 BREAK

UPM37 3:15-3:30 Trehalose Effects on Soybean Lipoxygenase-1 Catalysis and Activation Energy, Luis Guevara

UPM38 3:30-3:45 Investigating the Causes of Hatching Failure of Eastern Bluebird Eggs, Hannah Costa

UPM39 3:45-4:00 Clots and Chromatography: Analyzing the Role of Post-Translational Modifications on Blood Clot Formation, Caroline Daub

Moderator: Juan Beltran-Huarac  
Judge: Jasper Leavitt

## Undergraduate Poster Presentations (In-Person) Ballrooms

### Ballrooms | Biomedical Sciences

9:30-11:30

UPR01 The effects of manipulated performance feedback on the individual performance of a rope-pulling task, John White Singleton

UPR02 Combating bacterial biofilms: Functional characterization of the *Vibrio fischeri* biofilm regulatory protein SypE, Ehime N. Abhulimen and Morgan E. Milton

UPR03 Examination of ADAP/Centaurin- $\alpha$ 1 in Cognitive Dysfunction Using Trace Eyeblink Classical Conditioning, Luke Davis Jackson, Liz Harris, Wyatt Bunner

UPR04 Adhesion-Mediated Synapse Formation in Developing Neural Networks, Gaelle Desert, Daisy Perez, Michelle Cobb

UPR05 Exploration of Early-Stage Infection-Detection Bandages as Means for Increasing African American Health Outcomes, Marzuq Islam, Ono Abhulimen, Daniel Lee Dickerson, Shawn Anthony Moore

UPR06 A Self-Separating Colloid: A Stochastic Model of Sperm Cell Population Dynamics, Logan Michael Harrison

UPR07 The role of mRNA translation mechanisms in germ cell and embryonic development in *C. elegans*, Hannah B. Umphlett, Molly Lasure, Eun Suk Kim

UPR08 The Effect of Landing Error Scoring System Performance on Femoral Articular Cartilage Deformation in Recreationally Active Females, Lily Szwejbka, Matthew Blount, Starrett Vesper

UPR09 Offspring Deficits Associated with Paternal Western Diet Are Replicated by Depletion of miR-10 in *Drosophila melanogaster* Brain, Steven Bradley, Contributors: Elena Pak, Ethan Angell, Yousef Ahmed, Daniel Akhnoukh, Mohammed Ibrahim

UPR10 Electrochemical Detection of Abasic Sites in DNA using Novel Azulene Derivatives, Samantha Brandt, Rachel Smith, Elizabeth LaFave

UPR11 Developmental Toxicity and Immunotoxicity of Perfluorohexane Sulfonamide, Nia Moore, Qing Hu and Jamie C. DeWitt

### **Ballrooms | Business 9:30-11:30**

UPR12 Investigating Fraud and Strategies to Decrease Fraud within Youth Sports Organizations, Mason W Hudnall

UPR13 Student and Professional Perceptions of CPA Evolution, Jordan Patricia Anderson

UPR14 Investor's Perceptions regarding Fraudulent Environment, Social, and Governance (ESG) Disclosures, Madison O'Neal Cullipher

UPR15 InHouse Call- Business Plan, Grant Harrison Smith

UPR16 Accounting Students' and Professional Perceptions of Work-Life Balance and Stress in Public Accounting, Noah Preston Fox

UPR17 Covid-19 Effects on Commodity Pricing, Andrew Christopher Page, Thomas Robbins

### **Ballrooms | Fine Arts, Humanities, and Interdisciplinary Innovation 9:30-11:30**

UPR18 Voices of the Silenced: A Musical about Domestic Abuse, Mikaela Eleanor Trank- Director, writer, lyricist; Graham Podraza-Music Director; Alex Scanlan- Partial Lyricist (one song only); Emma Laughinghouse- Partial Lyricist (one song only); Paige Oneil- Choreographer

UPR19 Athelas the Healing Herb in Tolkien's The Lord of the Rings Books, Kelly Melissa Lizama

UPR20 Experiential Learning in the field of Social Work, Silvia Teresa Tyson

UPR21 Digital Mapping to Enrich Study Abroad Experiences, Nina Marlyn Carrillo Corujo, Julia Marie Kohake

UPR22 Compositional Analysis of Women's 19th Century Medicines by Liquid Chromatography-Tandem Mass Spectrometry, Grayson B. Sink, Elizabeth R. LaFave

UPR23 If I Had Known! Designing a Preparatory Course for Maximizing Study Abroad Experiences, Samantha Nichole Odell

### **Ballrooms | Natural Sciences 9:30-11:30**

UPR24 Does Black Gill Disease increase the likelihood of other parasitic infections?, Amanda Lynn Riggs

UPR25 Investigating the formation of Carolina Bays using ground penetrating radar, Jennifer H. Fulcher, Dr. Eric Horsman, Dr. David Mallinson

UPR26 Isolation and kinetic characterization of a plant lipoxygenase from maize, ZmLOX5, Yuri Ly Almonte, Kaylee Sagrero

UPR27 Identification and Characterization of Dry Detention Basins in the City of Greenville, NC: A Preliminary Assessment, Kaleigh Bell, Guy Iverson, Mike O'Driscoll, Rob Howard, Philip Van Wagoner, Charles Humphrey

UPR28 Toxicity of nanoparticle titanium dioxide on the biochemical and physiological mechanisms in *Camelina sativa*, Shivangi Jha

UPR29 Effects of Localized pH Changes on Enamelin Phosphoserine Stability, Rachael Adair Johnson

UPR30 Adamts9 Mutation Causes Ectopia Lentis in Humans and Zebrafish, Alyssa D. Blackwell, Jenny Thi Huynh, Caroline M. Johnston, Jonathan J. Carver, Lama Alabdi, Timothy Erickson, Fowzan S. Alkuraya, Yong Zhu

UPR31 DIVALENT CADMIUM AND LEAD INTERACTIONS WITH EF-HAND PROTEINS: AN INTRINSIC FLUORESCENCE STUDY, Taylor Falk, Tamara Vasquez

UPR32 The Importance of Temporal Components of the Advertisement Call in the Peruvian Mimic Frog, *Ranitomeya imitator*, Otha Malik Whitney

UPR33 Comparative Parasite Diversity in Panopeid Crabs, Carrie Adams

### **Ballrooms | Social Sciences 9:30-11:30**

UPR34 Examining the Cultural Validity of the Coping Flexibility Scale-Revised, Kolby Nicole Kinnaman

UPR35 Prevalence and Correlates of Stress-Related Growth due to the Pandemic, Jordan Signorelli

UPR36 The Relationship between Stigma and Mood in College Students with Disabilities, Caroline Penny Knox

UPR37 The Relationship between Athlete Efficacy Beliefs, Decision Making, and Eye-gaze, Emily M Ryan and Sophia Garcia

UPR38 The Impact of FIA's 2022 Rule Changes on Competitive Balance in Formula 1, Cameron Prince, Jonathan Lee, and Lester Zeager

UPR39 Oral Health Care Providers Retention Across ENC, Quaid Lawler, Dr. Lauren Sastre, Dr. Vanessa Pardi

UPR40 An Analysis of the Effectiveness of the Essential Air Services Program, Kaylee Brett Warren

UPR41 PREA protections for incarcerated transgender individuals: An updated comparison of state correctional policies in the United States, Tyler Shane Hug

### **Ballrooms | Biomedical Sciences 10:00-12:00**

UPR42 Functional Connectivity Alterations for Oculomotor, Cognitive, and Fine Motor Tasks Across Disease States in Neuroborreliosis, Jenna Grissam, Maanav Desai

UPR43 Neuroinflammation in Gulf War Illness, Olivia Marie Glazer

UPR44 Role of Ferlin Family in Human T-cell Leukemia Virus Type 1 Infection, Abigail Fruge, Kimson Hoang, Nicholas Polakowski, Isabelle Lemasson

- UPR45 Investigating the effects of inherent and applied fiber tension on fibrinolysis, Mason Lee Verhaeghe
- UPR46 Exploring the Relationship Between Migraines, Hemoglobin, and Oculomotor Controls, Kendall Riley Nelson, Clarke Oliver, Carolyn Baylee Haynes, Sydney Nestor
- UPR47 Setting Up an EEG Laboratory for Language Research, Maddie Coster, Matthew Walenski, & Kathrin Rothermich
- UPR48 The Influence of Fatigue on Decision Making in Adults with mTBI, Karen Warlick, John Mallett, Emily Smith
- UPR49 Sensorimotor and Visuomotor Characteristics of Baseball Pitching Performance, Samantha Morgan, Carolyn Baylee Haynes, Taylor Kinney, Baylor Fish, Jeremy Praski
- UPR50 Expression and purification of the regulatory domain of human cardiac troponin C: A protein optimization study, Luis Felipe Oliveira
- UPR51 Intracardiac Dopamine Receptor 1 and 3 Expression in Angiotensin II-Induced Hypertension, Myna Tirupattur, Srinivas Sriramula, Laxmansa C. Katwa

## **Ballrooms | Community Engagement, Diversity, Equity, and Inclusion, and Education**

### **10:00-12:00**

- UPR52 Building Emotional Intelligence Through LGBTQ Children's Books, Madison Alexander
- UPR53 The Pitt Perspective Podcast, Kamryn S Scott, Ashley H Wolfe,
- UPR54 Handwriting Abilities of Low-SES Elementary Students Compared to Grade-Level Expectations, Ashley Grace Jones
- UPR55 Researching and Writing a Children's Book for Underrepresented Groups in Literature, Lauren Anastasia Price
- UPR56 Effectiveness of Phonological Interventions with Students At-Risk for Reading Difficulties, Noelle Rose Halverson, Shelby Marie Hoggard

## **Ballrooms | Human Health 10:00-12:00**

- UPR57 Spring Evaluation of Low-Cost Aerosol Instruments, Joanna Mathew, Neha Joseph
- UPR58 Improving the Quality of Nasopharyngoscopy Data for Management of Velopharyngeal Insufficiency: A Multisite Experience, Lydia Marie LaFevers, Taylor Danielle Snodgrass, Kathryn Grace Fennie, Imani Rochelle Gilbert, Thomas James Sitzman
- UPR59 The effect of gravity on velopharyngeal soft tissue and muscles Haley M. Masterjohn
- UPR60 The Role of the Right Temporo-parietal Junction in Social Language Processing: A tDCS Study Protocol, Jewlia Burney, Ke'Asia Craig, & Kathrin Rothermich
- UPR61 Dialogic Reading and the Impact on Emergent Literacy and Developing Literacy Skills, Meghan Grace Whalen, Yolanda Holt
- UPR62 Neuroplasticity Mechanisms of Remote Ischemic Conditioning in Children with Unilateral Cerebral Palsy, Destiny Alling
- UPR63 Creating Methods for Measuring Individual Muscle Force through Ultrasound Elastography and Motion Capture, Nancy Chizorom Imoh
- UPR64 The Relationship Between Speech Recognition in Noise vs Dichotic Digits Performances, Katelyn Nichole Overcash
- UPR65 Exploring the Relationship Between Stuttering, Tinnitus, and Other Hearing Difficulties, Anna Scott Ivey, Patrick M. Briley
- UPR66 The Effect of COVID-19 Infection on Behavioral Measures of Auditory Function, Laney Pope, Andrew J. Vermiglio, Virginia Driscoll, Erin Kokinda, Drew Huffman, Gabriela Musumeci, Kaitlin Abrams, Alyssa Alford, Trenton Barnett, Morgan Deans, Kelly Dorman, Emily Harrison, Katelyn Overcash, Caitlyn Paulson, McKenzie Perry, Melissa Rafaniello, Olivia Sullivan
- UPR67 Association Between the Bindex® and CT Bone Parameters, Bridget Kenny
- UPR68 The Effect of a History of Noise Exposure on Speech Perception in Noise Ability, Olivia Sullivan, Andrew J. Vermiglio, Virginia Driscoll, Caitlyn Paulson, Melissa Rafaniello, Erin Kokinda, Drew Huffman, Gabriela Musumeci, Kaitlin Abrams, Alyssa Alford, Trenton Barnett, Morgan Deans, Kelly Dorman, Emily Harrison, Katelyn Overcash, Laney Pope, McKenzie Perry
- UPR69 The Effect of Musical Experience on Speech Recognition in Noise Ability, Melissa Rafaniello, Andrew J. Vermiglio, Virginia Driscoll, Caitlyn Paulson, Erin Kokinda, Drew Huffman, Gabriela Musumeci, Olivia Sullivan Kaitlin Abrams, Alyssa Alford, Trenton Barnett, Morgan Deans, Kelly Dorman, Emily Harrison, Katelyn Overcash, McKenzie Perry, Laney Pope
- UPR70 Physical Recovery versus the Usage of Analgesics for chronic pain among ECU Students, Kunj Chintankumar Patel
- UPR71 Standardizing Brake Force, Makenzie Raine Steidl
- UPR72 Gastrocnemius Stress and Stiffness Research in Relation to High Heeled Shoes Brandon Waugh, Coni Heinemann
- UPR73, The effect of risk for cochlear synaptopathy and musical experience on speech recognition in noise ability Kaitlin Abrams, Andrew J. Vermiglio, Virginia D. Driscoll, Alyssa Alford, Trenton Barnett, Morgan Deans, Kelly Dorman, Emily Harrison, Drew Huffman, Erin Kokinda, Gabriela Musumeci, Katelyn Overcash, Caitlyn Paulson, McKenzie Perry, Laney Pope, Melissa Rafaniello, Olivia Sullivan
- UPR74 Morphology of the Levator Veli Palatini Muscle: Volumetric Assessment, McKenzie Renee Perry, Neda Tahmasebifard

- UPR75 A Mixed Methods Review of the Fresh Start Program, Grace Corrine Regan
- UPR76 Perceptions of disposal options for prescription opioids among community members in Greenville, North Carolina, Cassidy Nicole Joyce
- UPR77 The relationship between Working Memory and Speech Perception in Noise Ability, Emily Harrison, Andrew Vermiglio, Virginia Driscoll, Caitlyn Paulson, Erin Kokinda, Drew Huffman, Gabby Musumeci, Kaitlin Abrams, Alyssa Alford, Trenton Barnett, Morgan Deans, Kelly Dorman, Katelyn Overcash, McKenzie Perry, Laney Pope, Melissa Rafaniello, Olivia Sullivan
- UPR78 Investigating the Relationship Between Compensatory Articulation Errors and Severity of Hypernasality: A Preliminary Literature Review, Hannah Ragsdale

### **Ballrooms | Engineering, Technology and Computer Sciences 1:00-3:00**

- UPR79 Simulation of Autonomous Vehicles for Safe Transportation Network, Sophie M Arruza
- UPR80 Determination of nutrient adsorption capabilities of 3D-printed ecomodules, Ariel R'Monie Lineberger
- UPR81 Concrete Crack Sealant in Infrastructure Repair Literature Review, Caleb Lane Messer, Amin Akhnoukh
- UPR82 Simplifying and Improving a Near-Point Convergence Test Tool, Jamie Bonfiglio, Claire Jenkins, Emma Cole, Nigel George
- UPR83 Bioplastic production for food packaging application: A proof of concept, Luciano DeRose, Kura Duba
- UPR84 Development of a Virtual Reality Assessment of Oculomotor Function, Austin Finlason, Rui Wu, Chia-Cheng Lin, Brian Sylcott
- UPR85 A Student-Centered Personalized Learning Framework to Advance Undergraduate Robotics Education, Nicholi William Kaminky, Carlos Ochoa, Austin Conner Finlayson, Zhen Zhu, Marjorie Campo Ringle, Rui Wu

### **Ballrooms | Human Health: Maternal and Child Health 1:00-3:00**

- UPR86 Walking Into Wellness, Gracie Reavis, Ana Cabrera-Perez, Bianca Martinez, Gauri Patel
- UPR87 Latino Families Experiences with Science in Their Daily Lives, Natalia Figueroa-Bernal and Adamari Calixto-Benitez
- UPR88 Centering Family Voice- A Multi-Dimensional Examination of Family Engagement, Ashley Zuniga, Pooja Deshpande
- UPR89 A Closer Look at Mothers in Rural North Carolina, Simona Adhikari
- UPR90 Exploratory Program Evaluation of BabyCare, a Medicaid-Funded Home Visiting Program in Virginia, Leslie M Osorio Pascual
- UPR91 Dentists and Dental Hygienists' role in Human Papillomavirus (HPV) vaccination uptake in North Carolina, Rory Moore
- UPR92 'If you just tell me you're 18, I'll still sell to you': A qualitative study of underage tobacco product purchasing experiences in a tobacco 21 compliance study, Tyler Austin West, Mahdi Sesay
- UPR93 A Group-Based Approach to Addressing Postpartum, Lactation, Pregnancy, and Mental Health Needs of Women, Miranda Faith Gavin
- UPR94 The Effects of Hand-Arm Bimanual Intensive Training (HABIT) on Real-world Bimanual Performance in Children with Unilateral Cerebral Palsy, George Grant Kirkman
- UPR95 Mapping and Analyzing the Pressuring Points and Structural Inequities of Maternal Healthcare, Shakira S Jones
- UPR96 Care Management for High-Risk Pregnancies, Lindsay Jean McCoy
- UPR97 Vaping Prevention Among the Youth Population in Pitt County, Alisia Ling Tseng & Jennifer Cremeens Matthews
- UPR98 The Impact of Dialogic Reading Techniques on Individuals with Autism, Katherine Manning Whitehurst
- UPR99 North Carolina Foster Care Systems, Audrey Bell

### **Ballrooms | Natural Sciences 1:00-3:00**

- UPR100 Using DNA Barcoding and Fouling Plates to Identify Cryptic Species, Rachel Gittman, & Charles Michael Brooks
- UPR101 Design of a pDronpa1.2-based optogenetic switch for control of disease-associated cytoskeletal structures, Hasitha Sri Tatineni
- UPR102 Anisotropic Cross Section for Elastic Scatterings Within the Quark Gluon Plasma, Jennifer H. Fulcher
- UPR103 Testing models of subvolcanic magma system growth using geochemistry and rock magnetism, Joseph Mohamed Abuarab
- UPR104 Identification of polyphosphate accumulating organism (PAO) candidates for biosensor development in WWTP, Ananya Koirala
- UPR105 Temperature study and genome analysis of marine Pseudoalteromonas sp., Opal E. Moore
- UPR106 Investigating the role microRNAs play in the root-knot nematode Meloidogyne incognita's viability, reproduction, and parasitism in cotton, Wesley Jennings Shepherd
- UPR107 Mitochondrial genome evolution suggests where the eukaryotic root connects to the tree of life, Ryan Leigh Griffin
- UPR108 Design and Application of an Immobilized Protein Kinase, Anna M. Schulz, Charles E. Booth Robert Hughes

### **Ballrooms | Social Sciences 1:00-3:00**

- UPR109 AN ANALYSIS OF PUBLIC OPINION ON HUMAN TRAFFICKING LEGISLATION IN NORTH CAROLINA, Aimee Corinn Heroux
- UPR110 Relationships among Cumulative Life Stress, Interoception, and Psychopathological Symptoms, Isabella Renee Benitez, Alia Simon
- UPR111 How 17th Century German Law Affected the Witch Trial of Katherina Kepler, Regan Moore and Christina Dolan
- UPR112 Aegean Frescoes and Their Correlating Myths, Shannon Shields Dugan
- UPR113 School-Based Mental Health Services in Students with Autism Spectrum Disorder, Alicia Taylor Ringgold
- UPR114 Public Opinion and Catholic Infrastructure's Impact on the Fluctuation of DignityUSA Chapters, Michelle Ann Voyles
- UPR115 Nativity differences in cardiovascular disease outcomes among Blacks in US, National Health Interview Survey (2013-2017), Madison Barnhill, Haley Taylor, and Leslie Cofie
- UPR116 Juvenile Court Outcomes across Race/Ethnicity, Taylor C Kibble

### **Ballrooms | Biomedical Sciences 1:30-3:30**

- UPR117 Effect of H-10 on Flexural Strength of Methacrylate-based Adhesive, Sarah Gillespie, Joesph Hampton, Saulo Geraldini
- UPR118 Immune Checkpoint Inhibitors-Induced Colitis is Mitigated in GPR4 Knockout Mice via TNF- $\alpha$  Downregulation, Luke W. Boldt, Mona A. Marie, Ashely J. Williams, Li V. Yang
- UPR119 Altered Hypothalamic Transcriptome in a Mouse Model of Multiple Sclerosis, Kristy M. Lau, Jonathon C. Carver, Alessandro Didonna
- UPR120 HIIT Training and preservation on muscle and mitochondrial function in mice, Hayden Gary Carter
- UPR121 Student Assessment of PM<sub>2.5</sub> Concentration at ECU Transit Bus Stops Using a Low-Cost Aerosol Monitor, Will Murray
- UPR122 Centaurin $\alpha$ 1-Bid Signaling in Alzheimer's Disease Progression, Mary E Phipps, Wyatt Bunner, Denys Bashtovyy, Ryohei Yasuda, Erzsébet M. Szatmari
- UPR123 Effect of Drop Jumping and Knee Valgus on Femoral Cartilage Thickness, Matthew G. Blount, Starrett Vesper, Lily Szwejbka, Anthony S. Kulas
- UPR124 Investigating Mechanisms of Synapse Formation in Developing Neural Circuits of a Human Brain Model, Daisy Perez, Gaelle Desert, Michelle Cobb, Karen Litwa
- UPR125 Sensorimotor and Visuomotor Characteristics of Baseball Pitching Performance, Samantha Morgan, Carolyn Baylee Haynes, Taylor Kinney, Baylor Fish, Jeremy Praski, Dr. Nicholas Murray
- UPR126 The Hidden Role of Dopamine Receptors 1 and 3 in Cardiac Fibrosis, Nandini Vishwakarma, Shannon E. Bryne, Srinivas Sriramula, Laxmansa C. Katwa

### **Ballrooms | Community Engagement, DEI, Education 1:30-3:30**

- UPR127 Hyde County Dental Project: Providing Oral Healthcare in a Health Professional Shortage Area, Wrenn McCrae Whitfield
- UPR128 Bringing Diversity to the ECU Honors College, Kyia Lanae Riddick, Mahogany Roper, Fosua Dadson
- UPR129 Impact of the HNRS 2000/3000 Course Sequence, Taylor Katherine Lee, Allison Nicole Werner, Nia Gilmore
- UPR130 Portfolio of informative materials for prospective East Carolina University students seeking accommodations from Disability Support Services, Aurora Shafer
- UPR131 African American English (AAE) Usage and Its Impact on African American Children in an Academic Setting, Kira Mariah Stith
- UPR132 The evolution of my identity as a literacy educator throughout my English Language Arts methods course, Molly Ryanne Baile
- UPR133 How do Children Respond to Fairytales?, Mallory Blair Smith
- UPR134 Investigating Co-planning and Co-teaching in Higher Education Statistic, Emma Rebekah White
- UPR135 PBIS through an International Lens, Calli Jon Massengill
- UPR136 A Survey of Perceptions of Cheating on Exams by Undergraduate Students, Jeremy Pope Dawson

### **Ballrooms | Engineering, Technology and Computer Sciences 1:30-3:30**

- UPR137 Recycled and Manufactured Adsorptive Materials to Reduce Phosphorous Concentrations in Wastewater Loads, Deja Alexis Drummond
- UPR138 Investigating the impact of flow rate on the structural and mechanical properties of clots formed under flow, Hannah Kristen Sowers
- UPR139 Evaluation of Hydraulic Spread Calculations for NC Bridges, Preston Lewis Skinner
- UPR140 Furcation Involvement Detection in Dental X-Ray imaging using Machine Learning, Jordan Welborn
- UPR141 The Benefit of Machine Learning Techniques to Aid Breast Cancer Recurrence Prediction, Madison Rose, Jarred Desrosiers

## **Ballrooms | Natural Sciences 1:30-3:30**

- UPR142 Identification of Iron-Oxidizing Bacteria on Steel Structures in Freshwater Environments, Meredith Cox
- UPR143 Reliability of E. coli as a Water Quality Parameter in Monitoring Urban Streams, Roman A. Mirra, Andron Adams, Tyra Denning, Surinder Gill, Eryn Meads, Scott Siebor, Christina Skinner, Randall Etheridge, Michael O'Driscoll
- UPR144 Characterization and Synthesis of Brucebactin Conjugate, Rodney Emmanuel De Diavoukana
- UPR145 Invasive species, Petrolisthes armatus, documented in North Carolina waters for the first time; New demographics and parasite diversity of the green porcelain crab, Chloe Elisabeth Manning-Moore, Carter Kathleen Stancil
- UPR146 Microglial changes in the brains of mice exposed to individual per- and polyfluoroalkyl substances (PFAS) specifically whether exposure affects basic locomotor activity and number/morphology of microglia in the brains, Jessica Ann Bartram
- UPR147 The Effects of the Metal Ions Zn and Ca on TTR Amyloid Formation, Ashton Nichole Norris, Kwang Hun Lim
- UPR148 Coastal Stressor Effects on Sediment and Salt Marsh Cordgrass (Spartina alterniflora) Root-Associated Microbiomes, Surinder Kaur Gill, Mary-Margaret McKinney, Rachel Gittman
- UPR149 The Effects of Horizontal Gene Transfer on the Evolution of Land Plants, Memphis C Jandron
- UPR150 Incorporating Team Science in Undergraduate Research, Seth E. Green

## **Ballrooms | Social Sciences 1:30-3:30**

- UPR151 Intersectionality and Burnout in Medical Residency Programs, Cassidy Johnson, Tolu Joaquim
- UPR152 Pain Acceptance and Anxiety in Adolescents with Sickle Cell Disease, Anna E. McMillan, Dhanashree R. Bahulekar
- UPR153 The Effects of Racialized Poverty Within the Health Care System of Eastern North Carolina, Kendra Renee Brent
- UPR154 Understanding the factors which influence the choice to pursue a career in accounting among Hispanic students, Evelyn Gonzalez
- UPR155 Factors that Impact Infidelity Forgiveness, Ruby Claire Bradford
- UPR156 Differences in cannabis strains and product types used most often by a cross-sectional sample of people who use cannabis to relieve pain, nausea in the United States, Devin William Sabatino, Kathleen Louise Egan

## **Undergraduate Student Posters (Online)**

### **MSC Room 237, 9:30-3:05**

- 9:30-10:30 Why are Women Less Motivated to Become Financially Literate?, Lexi McCoy
- 9:30-10:30 Palliative care providers and administrators' perspectives on integrating social determinants of health to provide community-based palliative care, Savannah Gail Blalock
- 9:30-10:30 The Effects of Per- and Polyfluoroalkyl Substances on Testosterone and Erectile Function through a Liver Peroxisome Proliferation Assay and Lipid Liver Histology, Anjalee J Hou, Johanna Hannan, Molly Alexander
- 9:30-10:30 Exploring Facilitators and Barriers in Advance Care Planning with Latino Leaders, Abby Harris
- 9:30-10:30 Purple vs. Gold: An Exploration of Tabletop Exercises for Collegiate Cybersecurity Training, Collin Garrett Roach, Isaiah Bradshaw, Tyler Allen Brown, Matthew Maurice Castelo, Donovan Earl Bernard
- 9:30-10:30 Facilitating Conversations About Advance Care Planning with Latino Leaders Using the Hello Game, Teresa A Hupp
- 9:30-10:30 Impact of Parental Substance Abuse on Children Involved with the Child Welfare System in the U.S.: A Literature Review, KaLynn Mae Toler
- 9:30-10:30 The Utilization of Interprofessional Education (IPE) in Nursing Education to Close the



Communication Gap Among Healthcare Teams: An Integrative Review, Jillian Irene Harvey

9:30-10:30 Genre Immersion, Jaela Angelique Fisher

9:30-10:30 A Needs Assessment for a Physical Activity Intervention for Caregivers, Kristen E Somma

9:30-10:30 The Relationship Between Breastfeeding and Postpartum Depression, Kendall Lynn Tingen

9:30-10:30 Monkeypox Vaccines: Importance of the Vaccinia Virus O1L Gene, Marina Nichole Boatman

10:45-11:45 The novel function of PUF-9 RNA-binding protein in *C. elegans* Parkinson model, Savannah Jean Marie Lipski, Mariah Jones, M.H Lee

10:45-11:45 Health Coaching Course Data Analysis and Evaluation, Maya B. Cowan

10:45-11:45 DRUGS CLASSIFICATIONS AFFECTING CHILDHOOD MALNUTRITION AND TIME-TO-RECOVERY IN GUATEMALA, Alexia L. Woodward

10:45-11:45 Evaluating the Impact of Social Media Influencers on Exercise Addiction in College-aged Women, Leah Sky Darby

10:45-11:45 The Community Resiliency Model and Community Well-being, Michaela Elmore

10:45-11:45 Introduction of Gender Affirming Care to the APRN Curriculum, Carly Marie Hebert

10:45-11:45 The Unmet Psychosocial Needs of Patients with Sickle Cell Disease from the Perspectives of Family, Patients, and Caregivers, Quinton Direll Braswell, Julie Danielle Doran, and Dr. Aimee West Smith

10:45-11:45 Groundwater Quality Improvements at a School in Eastern North Carolina after Installation of a Permeable Reactive Barrier, Lucas Colby Mebane, Charles Humphrey, Mike O'Driscoll, Guy Iverson

10:45-11:45 Nurses' Use of Chiropractic for Relief of Back and Neck Pain, Regan Taylor Vellan

10:45-11:45 Differences in Neurological Connectivity Between Right and Left Limb Dominant Individuals in Implicit Motor Sequence Learning, Jennifer Lee Painter

10:45-11:45 Veteran-centered health care: A mandate for nursing curriculum integration, Olivia Leigh Kingman

10:45-11:45 MCH Development & Support - An Evaluation, Peri Katrina Palmer

2:00-3:05 Neurocognitive Processes in Children During Talk in the Classroom, Denisse Rosales-Mercado

2:00-3:05 Perspectives of Latino Adults on Cancer Pain, Spirituality, and Advance Care Planning, Kylie Elizabeth Latino

2:00-3:05 Relationships of Religious Affiliation, Coping, and Support with Symptoms of Psychopathology in College Students, Daisy Kathleen Edmondson

2:00-3:05 Surveillance and Dental Health, Alexandra Lynette Marks

2:00-3:05 Rural Dwelling Women Living with HIV in the South: Facilitators and Barriers to HIV Care, Justine Nakanishi Caskey

2:00-3:05 Fresh Start Program at ECU, Jenny Bryant Harris

2:00-3:05 Soul Food: An Examination of Physical Actvitiy in Black Women, Jalen J Walker

2:00-3:05 Examining stress and quality of life in women who undergo and forgo infertility treatment, Alison D Swift, Melvin S Swanson, Emily R Thomas

2:00-3:05 LoRa Signal Mapping and Modeling for Deployment Planning, Henry H Jones, Braxton Chambers

2:00-3:05 Faculty Competency in Nursing Informatics: An Integrated Literature Review, Natalia Grace Biser

2:00-3:05 Data at Integrity, Trek Emerson Thorne

2:00-3:05 *Type IQ: A Typographic Research & Design Project*, Savannah Renae Harris

2:00-3:05 Pandemic miscarriages: Social determinants of health and patient experiences, Anna Whaley