**Undergraduate Oral Presentations**

**MSC 125 | Social Sciences**  
8:45 AM - 11:45 AM

<table>
<thead>
<tr>
<th>Session</th>
<th>Title</th>
<th>Presenter</th>
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<tbody>
<tr>
<td>UO1</td>
<td>Google Helps Students Adapt to the Rapidly Growing World of E-Commerce, Kristen McKool</td>
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<tr>
<td>UO2</td>
<td>Increasing Nutrition Literacy among Cancer Patients and their caregivers, Chelsea Thompson</td>
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<td>UO3</td>
<td>Athletic Lifestyle: Is It Here to Stay?, Alexa Petrellese</td>
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<td>UO4</td>
<td>LAST Study: Leisure Activity Step Tracking Study, Sarah Kautz</td>
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<td>UO5</td>
<td>The Influence of Depression on Medication Adherence Among Cancer Survivors, Scarlett Anthony</td>
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<td>UO6</td>
<td>Environmental Risks for High Intensity Drinking Among Young Adults: A Qualitative Study, Madison Garrigues</td>
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<td>UO7</td>
<td>A lesson learned the hard way: USA Gymnastics Larry Nassar Sexual Abuse Crisis, Kaitlyn Graden</td>
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<td>UO8</td>
<td>Familial Impacts on Childhood Cancer Abstract: A Literature Review, Caroline Morton</td>
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<td>UO9</td>
<td>A critical analysis of United Airlines’ Response Strategies for its Multiple Crisis Series, Matthew Campbell</td>
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<tr>
<td>UO10</td>
<td>The Role of Gender in the Association Between Symptoms of Depression, Substance Use, and Experiential Avoidance, Hunter Marie Davis</td>
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<tr>
<td>UO11</td>
<td>A Case Study in Social Media Management and Non-Profit Sport Big League Social Media: Cultivating Community Online, Ashley Weingartz</td>
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**BREAK**

**LUNCH**

**MSC 125 | Engineering/Technology**  
1:15 PM - 3:00 PM

<table>
<thead>
<tr>
<th>Session</th>
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<tr>
<td>UO12</td>
<td>Renewable Energy: Market Substitution and Potential Challenges, Owen VanRiper</td>
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<td>UO13</td>
<td>Moving Toward Zero-Waste for a Sustainable Future in Textiles, Ashley Miller</td>
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<td>UO14</td>
<td>Automated impact device for generating the impulse response of a complex coupled system, Samson Goodrich</td>
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<td>UO15</td>
<td>Vehicle Routing Simulation for Greenville, NC, Emma Kloth</td>
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<td>UO16</td>
<td>Comparison of Geometry-Based and Measured Coupling Ratios in Arrays of Cantilever Beams, Mariah Mook</td>
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<tr>
<td>UO17</td>
<td>City of Mebane Improvement Plan, Reid Butler</td>
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*Co-Presenter
Undergraduate Oral Presentations

MSC 249 | Human Health

8:30 AM - 10:00 AM

UO18 2:45-3:00 Evaluation of UAV Atmospheric Sensor Configurations on Satellite Signal Acquisition, Julian Quintero-Rivera

UO19 8:30-8:45 Clean Up Your Health Intervention - Healthy Housekeepers Initiative Phase Two Social Media Intervention, Christina Larkins

UO20 8:45-9:00 Bridging the Gap of Uncertainty and Doubt Between the Latino Immigrant Community and the Healthcare System, Becky Leon

UO21 9:00-9:15 miRNA regulation of TLR4 pathogen receptor expression and cytokine response in macrophages, Erin Lucci

UO22 9:15-9:30 Newborn Drug Screening: Methadone and EDDP Quantitation using LC/MS, Samantha Poppenfuse

UO23 9:30-9:45 Simulation of Patient Caregiver Counseling in Speech-Language Pathology, Leigh Harper

UO24 9:45-10:00 Environmental Assessment of On-Premise Drinking Establishments in Uptown Greenville, NC, Meredith Moskwiak

10:00-10:15 BREAK

MSC 249 | Biomedical Sciences

10:15 AM - 11:45 AM

UO25 10:15-10:30 Method Development for Nicotine Metabolite Ratio in Saliva for Comparison between Mental Illness and General Populations, Jay Tikekar

UO26 10:30-10:45 A Role For Interleukin-6 Trans-Signaling Following Vascular Injury, Troy Dennis

UO27 10:45-11:00 Regional Architecture of β-Catenin and p120-Catenin Interactions Examined by Stochastic Optical Reconstruction Microscopy (N-STORM), William Guiler

UO28 11:00-11:15 Trace metal elements in extracted and exfoliated teeth - The ECU Tooth Fairy Project, Mohammad Sarsour

UO29 11:15-11:30 Systematic Quantitation of Benzoic Acid Derived Preservatives in Beverages, Austin Allen

UO30 11:30-11:45 Claudin-7 regulates the inflammatory signaling in intestinal epithelial cells, Lesley Benderman

11:45-12:15 LUNCH

Undergraduate Oral Presentations

MSC 253 | Education

1:15 PM - 2:15 PM

UO31 1:15-1:30 Pilot Project for Global Competency Education in Eastern North Carolina Schools, Taylor Quinones

UO32 1:30-1:45 Insects and Persistent Misconceptions, Emma Rae Wester

UO33 1:45-2:00 More PEAS Please: Can Food-Based Learning Improve Preschoolers Vegetable Intake?, Jocelyn Bayles

UO34 2:00-2:15 Argument-Driven Inquiry: Tracking Progress Through General Chemistry, Meghan Lower

MSC 253 | Natural Sciences

8:30 AM - 11:45 AM

UO35 8:30-8:45 A Computational Analysis of the Hydroacylation of Aldimines in the Presence of a Wilkinson’s Catalyst, Alison Moller

UO36 8:45-9:00 Platinum Catalyzed Synthesis of Gamma-Keto Esters via C-H Bond Functionalization, Dylan Hardee

UO37 9:00-9:15 Where Do They Goby?: The Study of Gobiosoma bosc Behavior in Response to Visual Implant Elastomer Tags, Corey Winkler

UO38 9:15-9:30 WITHDRAWN

UO39 9:30-9:45 Settling differences: factors affecting nest size variation in the Eastern Bluebird Sialia sialis, Angelica Reed

UO40 9:45-10:00 Standard Practice for Formulating Green Enzymatic Detergent Products through the use of Wash Performance Evaluation, Stability Testing Techniques, and MALDI/MS, Anan Islam

10:00-10:15 BREAK

UO41 10:15-10:30 Investigating What Effect Flow Has on Fibrin Properties using Microfluidics, Miranda Lee

UO42 10:30-10:45 Expression and characterization of an immobilized Tobacco Ech Virus (TEV) protease: Streptavidin fusion protein, Jessica Norris

UO43 10:45-11:00 Characterizing the Binding of Ca(II) and Cd(II) to Wild Type and Mutant C35A and C84A hcTnC by ICP-OES and Isothermal Titration Calorimetry, Caitlin Palmer

UO44 11:00-11:15 Mechanics Regulating the Dissolution of Fibrin in Blood Clots, Sean Cone

UO45 11:15-11:30 Applying data science to study high-resolution precipitation delivery in rural Jamaica: 2014-2015, Calie Hemgen
Undergraduate Oral Presentations

**Great Room 3 | Human Health**

**1:15 PM - 2:45 PM**

**UO46** 11:30-11:45  What Factors Maintain the Mixed Mating System of a Local Annual Plant, Triodanis perfoliata?, Anna O’Brien

**UO47** 11:45-11:55  LUNCH

**UO48** 11:55-12:10  The Anger and Anxieties of the Asian and African Diaspora as Explored Through Poetry and Textile Arts, Andrew Li

**UO49** 12:10-12:25  Human: An Exploration of the Subjective and Objective Factors that Influence Our Understanding of What It Means to Be Human, Megan Piggott

**UO50** 12:25-12:40  Art: The Grand Illusion, Alexander Stoehr

**UO51** 12:40-12:55  Unlikely Hero, Carrie Thompson

**UO52** 12:55-1:10  Documenting a return to historical jazz through musical research and creation, Thomas Weybrecht

**UO53** 1:10-1:25  Increasing Cultural Awareness through my Passion for the Arts, Bina Amin

**UO54** 1:25-1:40  Knowledge and Perception of the Prevalence and Treatment of Type II Diabetes among Students at East Carolina University, Kelly Kimble

**UO55** 1:40-1:55  Vowel Identification in Regional Dialects of African American English in North Carolina, Carmen Love

**UO56** 1:55-2:10  Developing and Testing the Functionality and Usability of a Bereavement Support Web-Based Link for Bereaved Parents, Jacqueline Tyson

**UO57** 2:10-2:25  Marshmallow-Bagel Upper Gastrointestinal Study in Paraesophageal Hernia Patients, Coleman Hayes

**UO58** 2:25-2:40  Using Heart Rate Variability to Assess Resident Stress During Central Venous Catheter Simulation, Adelaide Robbins

**UO59** 2:40-2:55  The Effect of Enhanced Preparation on Students’ Performance in Simulation, Eliza Davis

**UO60** 2:55-3:10  Comparison of Levator Veli Palatini Muscle Contraction in Sustained Phonation Versus Connected Speech, Katherine Coleman

Undergraduate Poster Presentations

**Ballroom | Human Health**

**8:00 AM - 10:00 AM**

**UP1** Knowledge and Perception of the Prevalence and Treatment of Type II Diabetes among Students at East Carolina University, Kelly Kimble

**UP2** Vowel Identification in Regional Dialects of African American English in North Carolina, Carmen Love

**UP3** Developing and Testing the Functionality and Usability of a Bereavement Support Web-Based Link for Bereaved Parents, Jacqueline Tyson

**UP4** Marshmallow-Bagel Upper Gastrointestinal Study in Paraesophageal Hernia Patients, Coleman Hayes

**UP5** Using Heart Rate Variability to Assess Resident Stress During Central Venous Catheter Simulation, Adelaide Robbins

**UP6** The Effect of Enhanced Preparation on Students’ Performance in Simulation, Eliza Davis

**UP7** Comparison of Levator Veli Palatini Muscle Contraction in Sustained Phonation Versus Connected Speech, Katherine Coleman

**Ballroom | Human Health**

**10:00 AM - 12:00 PM**

**UP8** The Influence of Maternal Exercise and Nutrition on Health Disparities and Birth Outcomes, Madigan Raper

**UP9** The Effects of Aerobic Exercise Intensities on Central Blood Pressure in Overweight and Obese African Americans, Ethan Holland

**UP10** Word Identification: The Influence of Sex, Race, and Regional Dialect, Morgan Widdowson

**UP11** Current State of Research in Velopharyngeal Ratios to Determine Velopharyngeal Competence: A Review of the Literature, Brianna Swain, *Abigail Schwan*

**UP12** The Relationship between Patient Portals, Engagement, and Outcomes: Is Health Literacy an Important Link?, Drew Corpening

**UP13** HPV Health Literacy and Vaccination Recommendation Practices of North Carolina Physicians, Kristen Barnes

**UP14** Parental Support, Efficacy, and Objectively Measured Physical Activity Among Preschool-Aged Children, Dominique Bellardini
Undergraduate Poster Presentations

Ballroom | Human Health  
8:00 AM - 10:00 AM

UP15 INQUIRY: Health Information Outreach, Avery Bryan
UP16 The Impacts of Age on the Communication Between the Cranial Base Angle and Cervical Vertebrae, Shana McCasker
UP17 Contribution of the Palatoglossus Muscle to Speech Production: A Systematic Review of the Literature, Imani Gilbert
UP18 Racial Identification of African American and White Female Speakers, Monica Beingolea
UP19 Let’s Talk About Sex!, Samantha Foster
UP20 Parenting Styles and Their Relationship to the Physical Activity Levels of Preschool-aged Children, Hannah Cooper
UP21 An Examination of Sugar Sweetened Beverage Consumption among Pre-school Age Children in Eastern North Carolina, Gabby Rudiak

Ballroom | Human Health  
10:00 AM - 12:00 PM

UP22 Tense and Lax Vowel Identification Errors in Regional Dialects of English, Megan Jackson
UP23 Understanding What Factors Influence Mammography Follow Up Times, Kristin Coleman
UP24 Health related consequences of musculoskeletal injuries in adolescents and adults: a comprehensive literature review, Abigail Donahue, Margaret Marshall
UP25 Participant’s Experience with Biofeedback: A Phenomenological Study, Regent Perez
UP26 Examining Depression Scores and Cardiovascular Risk in a Community Sample, Alexandra Stephens
UP27 South Asian Cancer Cross-Sectional Study, Kirtan Amin
UP28 Use of Ecological Momentary Assessment to Assess Sedentary Behavior among Children ages 2-5 years, Ashlyn Hyde
UP29 A Content Analysis of Facebook Groups on Chronic Obstructive Pulmonary Disease (COPD), Avery Apperson

Undergraduate Poster Presentations

Ballroom | Social Sciences  
1:30 PM - 3:30 PM

UP31 U.S.-Russian Foreign Relations: Strategic Nuclear Forces and Arms Control Agreements, Christa Gordon
UP32 Future Faculty Role Intent of North Carolina Associate Degree Nursing Students, Casey Powell
UP33 Understanding Sexual Assault Victimization Among College Men: A Mixed Methods Approach, Emily Downs
UP34 Developing and Testing the Functionality and Usability of a Bereavement Support Web-based Link for Bereaved Parents, Laura Whittington
UP35 Prehistoric Artifact Classification at Raven Rock State Park, Timothy Boykin
UP36 The Effects of Motivational Primes on Exercise Performance, Kaleb Davis

Ballroom | Social Sciences  
1:30 PM - 3:30 PM

UP37 Romantic Breakup: Difficult Loss for Some but Not for Others, Kerry Carter
UP38 Examining Cardiovascular Risks in a Community Sample, Kaitlin Guard
UP39 Humanitarian Aid and its Effect on Conflicts with Multiple Rebel Factions, Madeline Fleishman
UP40 Family Matters: The Relationship between Eating Family Meals, Attachment, and Eating Behaviors, Amanda Lionelli, Tori Blanchette
UP41 Association between HRV and Social Anxiety in a College Population, Eliza Varju
UP42 The “Good Death”: An ethnographic case study of rezadoras in Guatemala, Graziella Dominado
UP43 Objective Measurement of Physical Activity Over Time in Older Adults with Heart Failure, Catherine Taylor

Ballroom | Natural Sciences  
8:00 AM - 10:00 AM

UP44 Creation of Radar Imagery to Study Seasonal Changes in Precipitation Regimes in the S.E. United States, WITHDRAWN
UP45 Behavioral Assessment of Wandering Spiders, Radha Patel
UP46 Influence of Ethics on Evolution, Mohammad Farah
UP47 “A Comparison of Fitness Benefits of Two Flower Types in Triodanis perfoliate”, Franklin Xiong
Undergraduate Poster Presentations

UP48  The Generation of an Antibody to the Bearded-Ear Protein in Maize Plants, Jessica Bland
UP49  Protocol Development for Extracting Microbial DNA from Agarose, Allison Fisk
UP50  Codon Usage Bias of Genes Expressed in Venom Glands, Khaleb Enoch
UP51  Submerged Aquatic Vegetation (SAV) loss in North Carolina Estuaries, Noah Gwynn

Ballroom | Natural Sciences  
10:00 AM - 12:00 PM

UP52  Elucidation of 15-Lipoxygenase-2 and PIEB1 Interactions Implicated in Acute Renal Failure, Katherine Ray
UP53  Mitochondrial DNA variation in the pitcher plant fly Sarcophaga sarracenia: Exploring possible influences of host specificity and geographic structuring, Joshua Parker
UP54  Determining the Energy Landscape of the Integrin-iC3b Bond Under Dynamic Force, Justin Litofsky
UP55  Working hard or hardly working? Life as a non-dominant iron oxidizing bacteria, Sophia Pearce
UP56  The Synthesis of Salicylaldehyde Derivatives, Adam Burch
UP57  Time for Tea: Consequences of long-term fertilization on wetland microbial community structure and decomposition, Megan Koceja

UP58  Effects of Hurricane Florence on marine carbon cycle processes, Megan Koceja
UP59  Examining the Role of Microorganisms in Underwater Carbon Cycling, Matthew Woodlief

Ballroom | Natural Sciences  
8:00 AM - 10:00 AM

UP60  Molar Mass, Molar Mass Distribution and Mass Bias for synthetic polymers using Low Charge State ESI-MS compared to GPC and GPC-MALS, Michael Dragulski
UP61  Elucidation of allosteric behavior and enzyme-effector complexes of human 15-lipoxygenase-2 through hydrogen-deuterium exchange mass spectrometry, Amy Musgrave
UP63  Variations in morphometric condition of larval Atlantic Croaker (Micropogonias undulatus) as a function of temperature, zooplankton, and seasonality, Erika Desiderio-Segovia

Undergraduate Poster Presentations

UP64  Geographically distinct but non-monophyletic morphs: Reexamining the evolution of color in Florida burying beetles (Coleoptera: Geotrupidae: Peliotrupes), Emily Scott
UP65  Androgen and progesterone receptor knockouts in zebrafish affect aggression and social dominance, Julia Brown
UP66  Use of HPLC Column Retention Probes to Predict Pharmaceutical Method Development Direction, Caleb Collins
UP67  Development of novel tryptophan analogues to study and expand protein function, Kristin Tyson

Ballroom | Natural Sciences  
10:00 AM - 12:00 PM

UP68  All About the Reads: Sequencing Environmental Microbial Genome with Nano-pore Technology and Comparing Its Quality to Other Sequencing Methods, Kelvin Macklin
UP69  Social Regulation of the Escape and Swim Motor Circuits in Dopamine Receptor Type 1 Mutant Zebrafish (Danio rerio), Joseph Ward
UP70  Parasites as Indicators of Biodiversity in Coastal Shoreline Habitats, Emily Edmonds
UP71  Measuring Soil Sulfate Reactions Rates And Redox Potential Under Nutrient Manipulations In A Pocosin Wetland, Brent Williamson, Christopher Rogers
UP72  Elucidation of allosteric behavior and enzyme-effector complexes of human 15-lipoxygenase-2 through hydrogen-deuterium exchange mass spectrometry, Amy Musgrave
UP73  Characterizing the binding of a 33-mer EF-hand peptide to Ca(II) and Cd(II) using Isothermal Titration Calorimetry (ITC) and Circular Dichroism (CD) Spectroscopy, Kijay Byers
UP74  Fluorescent Protein Cell Sorting as a Method to Isolate a Stable Cell Line, Elizabeth Viverette
UP75  describing Collaborative Exams Using Random Graphs, Marshall Adkins

Ballroom | Education  
1:30 PM - 3:30 PM

UP76  Tackling Student Debt, Bradley Atkinson
UP77  Building QI Nurse Leaders: Validating a MSN - Nurse Leader "Stand-alone" Quality Improvement Course (QI) Based on Student Learning Outcomes, Madison McCauley
UP78  The Need and Impact of Peer Education in the Field of Mental Health || PsydeKick, Danielle St. Onge, Sara Poston, Molly Moseley, Nicholas Mork
UP79  Using Dialogic Reading to Foster a Growth Mindset in Early Elementary Students, Jenna Murdoch

*Co-Presenter
Undergraduate Poster Presentations

UP00 | More PEAS Please! Assessing the Implementation of a Hands-on Nutrition Education
Curriculum in Head Start, Jeremy Cox, *Danielle Adams, *Lauren Butler

UP01 | The Impact of Experiencing Immersive Simulation in Teaching, Carley VanHoy

UP02 | Improving Student Understanding of Mitochondrial Bioenergetics with Teaching Tool, Jessica

UP03 | And the Band Played On: A Case in the Consequences of Student Activism, Amber Sturdivant,
*Chloe Pearson, *Jayla Cofield

Ballroom | Humanities
1:30 PM - 3:30 PM

UP04 | I Made It Up: Maps, Essays, and Other Guides for the Queer Black Girl, Glenesha Berryman

UP05 | Linking Taoilkovsky's Rocket Science to the Humanities, Chase Neese

UP06 | Chekhov and Shakespeare on the Modern Stage: Two Plays in One Show, Katie Collins

UP07 | The H&M Racist Scandal: Diversity Deficits in an Era of Global Public Relations, Ava
Criscitello

Ballroom | Biomedical Sciences
8:00 AM - 10:00 AM

UP08 | Role of Dopamine-3 Receptors in left ventricular cardiac fibroblasts proliferation, Deepthi
Melit Thomas

UP09 | Expression of Human IFN-β Protein by Chinese Hamster Ovarian Cells, Todd Hylton

UP10 | Development of a Manual Documenting Pre-Clinical Application of Songbirds as a Model to
Assess Drug Efficacy to Improve Vocal Learning, Carly Iudd, *Rachel Hodges

UP11 | Improvements of an Organophosphate and a Pyrethroid on Insecticide Resistance in Culex
quinquefasciatus (Diptera: Culicidae), Deryn Smith

UP12 | Age-dependent study of pathological progression of Alzheimer's disease in hippocampal and
cortical tissue of human and an AD mouse model, Taylor Leposa

UP13 | Characterization of predicted microtubule-associated proteins in sensory hair cells of zebrafish
(Danio rerio), William Biggers

UP14 | Molecular chaperone Tetratricopeptide repeat protein 2 (Tpr2) is essential for germline stem
cell self-renewal and timely cyst divisions in Drosophila melanogaster oogenesis, Morgan
Phillips

Undergraduate Poster Presentations

UP55 | An Examination of Potential Neurobiological Differences in Exercisers and Non-Exercisers, Rachel
Grantham

UP56 | The Effect of Downstream Resistance in a CABG, Anup Sanghvi

UP57 | Targeting Enzymes of Sphingolipid Metabolism in Treatment of Colorectal Cancer, Conor Pumphrey

UP58 | Influence of Modified Starches on Mental Performance and Physical Endurance Following
Exhaustive Exercise, Callie Herman

UP59 | SCI-Induced Morphine Tolerance is Associated with Dopamine Pathway Expression, Ryan Patton

UP100 | The role of N6-methyladenosine (m6A) mRNA modification in regulating tumor cell progression,
Kristin Chesnutt

UP101 | Do Prenatal Supplements Protect the Placenta from Environmental Contaminates, Ariel Fricke

UP102 | Factors Leading to DKA Readmissions: A Qualitative Content Analysis Study, Mattie Parrott

Ballroom | Biomedical Sciences
10:00 AM - 12:00 PM

UP103 | Decellularizing Murine Hearts for Electrospinning 3D Microenvironments, Patricia Malcolm

UP104 | The Role of PGRMC1 in Hormone Metabolism in Zebrafish, Pujan Patel

UP105 | Negative Cumulative Impact of Low Testosterone and Cavernous Nerve Injury on Pelvic Neuron
Survival is Improved by Testosterone Supplementation, Jennifer McMains

UP106 | The Relationship Between Speech Recognition in Noise and Reading Abilities, Hannah Moore

UP107 | Platinum Catalyzed Synthesis of Alpha-Keto Esters via C-H Bond Functionalization, Christopher
Rogers

UP108 | The voltage-gated Ca2+ channel Cav1.3 regulates gene expression in zebrafish, Cameron Smith

UP109 | Influence of Intrinsic Aerobic Running Capacity on Cardiac Adaptive Responses to Stress, Alexander
Clark

UP110 | High fat diet impairs detrusor mitochondrial fatty acid oxidation in male but not female mice,
Hanna Kostnik
## Undergraduate Poster Presentations

### Ballroom | Biomedical Sciences 10:00 AM - 12:00 PM

**UP111** Quantitation of Benzoate Preservatives in Drinks Commonly Consumed by NC's Pediatric Population, Nolan Davis

**UP112** Beneficial Neurocognitive Effects of Chronic Naltrexone Treatment in Rats Poisoned with the Sarin Analog Diisopropylfluorophosphate, Justin Martin

**UP113** An ECG analysis determining the impact of mother's metabolic equivalent value in pregnancy on infant heart rate variability, Alexandra Williams

**UP114** Effect of the extracellular matrix on macrophage remodeling responses, Felicia Jaimes

**UP115** Prostatic radiation increases cholinergic gene expression leading to enhanced nerve-mediated contractions, Alexander Turner

**UP116** Brain iron deficiency alters sleep performance in a mouse model of Restless Legs Syndrome, Joseph Basco

**UP117** Design, Expression, and Characterization of a Bifunctional Protein Chimera for Applications in Molecular Biology, William Taylor

**UP118** Physiological Effects of the Melanocortin-1 Receptor Gene in Poison Dart Frogs, Matthew Pahl

**UP119** Conserved residues of the periplasmic iron transporter from Brucella spp., play important roles in the native structure of the FtrA protein: A calorimetric study, Mina Chanakira

**UP120** Electrospinning Synthetic Extracellular Matrix, Anuj Sanghvi

**UP121** The effect of different optic flow speeds on cognitive performance in sitting and standing, BinKai Hsu

**UP122** Investigating the Impact of Mettl16 Cellular Localization on RNA Binding Preferences, Daniel Nance

**UP123** Understanding conformational dynamics of Transglutaminase 2 (TG2) using denaturant-induced unfolding studies, Alexander Hondros

**UP124** The Antifungal Properties of Berberine Chloride on Candida spp., Danish Hasan, *Ketan Joglekar

**UP125** Garlic bioactives influence macrophage associated matrix remodeling enzyme expression in vitro, Thais Oliveira

**UP126** Biomechanical Alterations in the Snatch during a Bout of 30 Repetitions, Hannah Black

### Ballroom | Biomedical Sciences 8:00 AM - 10:00 AM

**UP127** Effective Recruitment Strategies for Community-Based Health Initiatives in At-Risk Communities, Michael Denning


**UP129** Creating a Club to Increase Sexual Assault Awareness and Prevention on ECU's Campus, Danielle Adams, *Phoenix Little

**UP130** Factors Influencing Community Collaboration in Public Health Initiatives in Developing Countries, Claudia Woznichak

**UP131** Sustainable Success: Motives & Charity Sport Events, Bailey Cooper

**UP132** Quiz of Student Interest (QSI), Stephanie Goodman, *Madison Dalgreen, Elizabeth Majette, Abigail Squires

**UP133** Health4PINE: Our Health Our Responsibility Course Effectiveness, Pranaya Pakala

**UP134** Beaufort County Regional Park Site, Samuel Hunter


**UP136** Ending Drunk Driving at East Carolina University, Michael Crumpler


**UP138** Not Broken: Improving Disability Sport, Sarah Horrell

**UP139** Hog Slat Process Improvement Capstone, Houston Beasley, *Dylan Scheck

**UP140** Gregory Poole Abstract, Jarrett DePizzol

**UP141** Development of a second generation novel air puff system prototype for use in medical, cosmetic, and food industry, Keith Williams, *Antonia Dingeman, *Grace Krell

**UP142** Characterizing Pulmonary Artery Hemodynamics in End-Stage Renal Disease Patients, Daniel Pearce


**UP144** Crown Equipment Corporation, Cole Brunet

**UP145** DSM Dyneema Process Improvement Project, Andrew Thomas, *William Jackson
Undergraduate Poster Presentations

**Ballroom | Engineering**

**8:00 AM - 10:00 AM**

UP146 Modeling of human insulin-glucose response mechanism for diabetes analysis, Natalie Bell

UP147 Design of a Patient Orientation Monitoring System, Christopher Satterley, *Christopher Satterley, *James Barros

UP148 Pressure Evaluation of Tracheal Suction Catheters to Reduce Damage to Respiratory Airways, Marcus Moody

UP149 The Future of Advanced Manufacturing in High Bay, Eric Clark, *Avery Jeffers

UP150 3D Printing Patient-Specific Images for Diagnostics and Perioperative Planning, Joshua Butler

UP151 The Future of Engineering Education, Jeremiah Johnson, *David Harr

UP152 Detection of the Freshness of Fish Using A Novel Air Puff Device, Antonia Dingeman

**Ballroom | Engineering**

**10:00 AM - 12:00 PM**

UP153 Mestek’s Replacement Parts, Steven McKinney, *Alexander Roten


UP155 Capstone Project for IENG 4900, Patrick Thompson, *Nicholas Clarke

UP156 Winterville Metal Works, Cody Blackburn

UP157 Detection of the Freshness of Fish Using A Novel Air Puff Device, Grace Krell

UP158 Weyerhauser Capstone, Gregory DeDecker

UP159 Analytical Model of Ocean Energy: Determining Peak Energy Level Potential, Angela Krebs

**Ballroom | Business**

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

UP160 Size Inclusivity, Ronicka Evans

UP161 How Does Interactivity With App Affect Customer’s Continuance Retention?, Richard Fisher

UP162 Investigation of Effects of Social Factors of Apps on Customer Continuance Intention, Katherine May

UP163 The Failure of Lehman Brothers: What went wrong?, Victoria Bishop

UP164 Preparing the Future Accounting Professional for a Rapidly Changing World, Marianna Shurina

UP165 Utilizing the Lean Launchpad Method to Determine Feasibility of Creating Interactive Digital Media as a Health Education Tool for Phosphorus Management in Chronic Kidney Disease Patients, Priya Patel

*Co-Presenter

Undergraduate Poster Presentations

**Ballroom | Technology and Computer Sciences**

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

UP166 Ameratrail Boat Trailers, Campbell Locke

UP167 Enhancement of operational sustainability of a nationally-renowned park through the use of renewable energy and energy-efficient technology, Matthew Yaeger

UP168 HMF Express Process Improvement Project, Theotokis Mavroidis

UP169 Real-time Augmented Reality Data Visualization Based On External Sensors, Dean Murray

UP170 Spirit Aero Capstone Abstract, Everett Sawyer

UP171 Big Data Analytics for Historical Document Processing, James Philips

UP172 In Pursuit of Green Office Certification, Leanna Pond, *Jason Loria

Research Week Daily Schedule

RCAW SCHEDULE: April 1 – APRIL 8, 2019
New Main Campus Student Center, 10th Street

April 1 — April 8

APRIL 1
8:15 am – 5:00 pm | Graduate Student Presentations
Oral sessions in Rooms 125, 249, 253
Graduate & Postdoc Posters in Grand Ballrooms
Postdoctoral Scholar Posters in Grand Ballrooms
8:00 am – 10:00 am | GPSS sponsored Coffee with free student professional photos | Piano Bar, 2nd floor
12:00 pm – 1:00 pm | GPSS & TEDxECU presents: Impact | Black Box Theatre

APRIL 2
2:00 pm – 5:00 pm | International Scholars and Student Symposium | Black Box Theatre

APRIL 3
8:15 am – 5:00 pm | Undergraduate Student Presentations
Oral Sessions | Rooms 125, 249, 253
Posters | Grand Ballrooms
12:00 – 1:00 pm | Grad-Undergrad Student mixer | 3rd Floor Deck, east side covered patio
4:00 pm – 6:00 pm | College of Education: Faculty and Student Research Showcase | Black Box Theatre

APRIL 5
2:00 am – 4:00 pm | Biomaterials Research Cluster Lightning Talks
Lightning talks | Room 253
4:00 pm Reception | Room 249
1:00 pm – 4:00 pm | Innovation, Entrepreneurship, Intersection of Arts & Sciences Showcase | Ballroom A
1:00 pm – 2:00 pm | Posters
2:00 pm – 3:45 pm | Oral Presentations & Performances
3:45 pm – 4:35 pm | Provost’s Challenge
4:00 pm – 5:30 pm Reception and Awards Ceremony | Room 249

APRIL 8
12:00 pm – 1:30 pm | Student Awards Luncheon (Invitation Only) | MSC Great Rooms 1+2+3
ECU Distinguished Graduate Faculty Mentor Awards
Thesis/Dissertation Awards
RCAW Undergraduate Awards
RCAW Graduate Awards
RCAW Postdoctoral Award
Innovation, Entrepreneurship and Intersection Awards
THANK YOU!

Thank you for your interest in East Carolina University's RESEARCH & CREATIVE ACHIEVEMENT WEEK 2019

The RCAW Committee would like to thank all of those who participated and attended.

We look forward to seeing you again next year for RCAW 2020!

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