The Undergraduate Research Competition is a spring tradition at Coastal Carolina University. This year, students and faculty mentors from 21 different majors and all university colleges have worked to produce over 70 presentations. These are the results of months, and in some cases, years of effort on undergraduate research projects, and demonstrate the strength of experiential learning at CCU. Congratulations, presenters!

Program Overview

Tuesday, April 12, 2016
  2:30-4:00 PM  Poster Session I, Lib Jackson Student Union Atrium

Wednesday, April 13, 2016
  9:30-11:00 AM  Poster Session II, Lib Jackson Student Union Atrium
  12:20-5:40 PM  Oral Presentations, Brittain Hall, 1st Floor

Concurrent Event
  Senior Exhibition (portfolios from graduating Graphic Design and Art Studio majors)
  • Portfolio 1: April 8-April 19, 2016, Rebecca Randall Bryan Art Gallery
  • Portfolio 2: April 25- May 6, 2016, Rebecca Randall Bryan Art Gallery

Individual Presentations and Abstracts can be found on the following pages
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<tr>
<th>Time</th>
<th>BRITTAIN HALL RM 101</th>
<th>BRITTAIN HALL RM 112</th>
<th>BRITTAIN HALL RM 114</th>
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<tbody>
<tr>
<td>12:20 PM</td>
<td>Juliane Caughron and Abbey Chaney</td>
<td>LaVasia Jackson</td>
<td>Maryland Lewis</td>
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<td></td>
<td>“Evaluation of Variables Effecting Foraging Success Rates in Eastern Brown Pelicans (Pelecanus occidentalis carolinensis) on the South Carolina Coast” Faculty Mentor: Eric Rosch</td>
<td>“The Impostor Phenomenon and Racial Identity” Faculty Mentor: Maggi Morehouse</td>
<td>“Physical Factors Connected to Hypoxia in Long Bay” Faculty Mentors: Diane Fribance and Louis Keiner</td>
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<td>12:40 PM</td>
<td></td>
<td>Meagan Denny</td>
<td>Brooke Campbell</td>
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<td>“Norway's Prison System: Investigating Recidivism and Reintegration” Faculty Mentor: Richard Aidoo</td>
<td>“The Effects of Sediment Compaction of Ghost Crab Burring Behavior” Faculty Mentor: Eric Rosch</td>
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<tr>
<td>1:00 PM</td>
<td>Beck Aynaev, Raegan Kaufman, Richard Sampson and Tryell Brown</td>
<td>Rayne Newswanger</td>
<td>Emily Carter</td>
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<td></td>
<td>“Economic Analysis of Proposed Murrells Inlet Bike Path” Faculty Mentor: Robert Salvino</td>
<td>“Vertical Distribution of Demersal Fish Larvae in North Inlet Estuary, SC.” Faculty Mentor: Juliana Harding</td>
<td>“Testing the Selfish Herd Hypothesis in Fiddler Crabs” Faculty Mentor: Eric Rosch</td>
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<tr>
<td>1:20 PM</td>
<td>Nicole Kuhn, Samuel Treacy, Alioune Diagne and Rashad Baker</td>
<td>Rachel Houston</td>
<td>Nicholas Picha</td>
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<td>“Adding Value to Regional Transit Systems in a Seasonal Tourist Destination” Faculty Mentor: Robert Salvino</td>
<td>“Communication and Citizen Participation in Southern Local Politics: A Disconnect Between Municipalities and Constituents” Faculty Mentor: Adam Chamberlain</td>
<td>“Exposing Artemia Salina to Chattonella Subsalsa, a Toxity Test” Faculty Mentors: Eric Koepfler and Amy Grogran</td>
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<td>1:40 PM</td>
<td>Samantha Bergold</td>
<td>Bridges Q&amp;A Session</td>
<td>Kaela Moon</td>
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<td></td>
<td>“Malum Ex Machina: Violence and Technology in Media” Faculty Mentor: Wes Fondren</td>
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<td>“Ontogenetic Timing of Sexual Dimorphism in Juvenille Boa Constrictors” Faculty Mentor: Scott Parker</td>
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<tr>
<td>2:00 PM</td>
<td>Amy Thomas and Rachel Drummond</td>
<td>Christopher L. Pierpont</td>
<td>Harley Coates and Larissa Martin</td>
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<td>“Counterterrorism or Vigilantism? The Cyber War Between ISIS and Anonymous” Faculty Mentor: Joseph Fitsasankis</td>
<td>“Characterization of an Essential Chloroplast Protein” Faculty Mentor: Michelle Barthet</td>
<td>“Heavy Metal Concentration in Donax Clams Found in Myrtle Beach Analyzed Using Atomic Absorbion” Faculty Mentor: Kevin McWilliams</td>
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<td>2:20 PM</td>
<td>Christopher Wright “Johann Sebastian Bach’s Signature Loops: Interpreting the Underlying Temperament System of the Well-Tempered Clavier” Faculty Mentor: Eric Crawford</td>
<td>Maria Acosta Questioning the Quality of ’Top Apps’ for Early Childhood Math” Faculty Mentor: Todd Cherner</td>
<td>Jourdan Lakes “Development of a [2] Catenane Synthetic Method and a Student Beliefs Survey for a Hybrid Organometallics Course” Faculty Mentor: Kevin McWilliams</td>
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<td>2:40 PM</td>
<td>Briana Laws “Obstructive Sleep Apnea: Testing the Accuracy of the SLEEPMED Questionnaire” Faculty Mentor: Sharon Thompson</td>
<td>Heather Banning “Olfactory Effects on Selective and Sustained Attention and Working Memory” Faculty Mentor: Terry Pettijohn</td>
<td>Steve Butler “Country Cooking and Sunday Dinner: Southern Foodways” Faculty Mentor: Maggi Morehouse</td>
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<td>3:00 PM</td>
<td>Steven Carruth “Examining the Four Types of Cyclists in the Grand Strand” Faculty Mentor: Sharon Thompson</td>
<td>Erin Huggins “Discrimination in the Era of Preventive Medicine: An Examination of Physician Bias in Recommendations for Cancer Genetic Testing” Faculty Mentor: Lisa Winters</td>
<td>Lyndsay Young “Genetic Analysis of ROS-Mediated Neurodegeneration in C. elegans” Faculty Mentor: Daniel Williams</td>
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<td>3:20 PM</td>
<td>Kerry Dittmeier “Souls Without Solace - Bridging the Gap Between Perceptions and Reality” Faculty Mentor: Sharon Thompson</td>
<td>Alioune Diagne “Economic Development in Africa” Faculty Mentor: Robert Salvino</td>
<td>Kyle Massie “Bottlenose Dolphin (Tursiops truncates) Association Patterns Examined off the Coast of North and South Carolina” Faculty Mentor: Rob Young</td>
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<td>3:40 PM</td>
<td>DeVariay White “Assessing Lifestyle and Hip Range of Motion as it Relates to the Prevalence of Low Back Pain” Faculty Mentor: Sharon Thompson</td>
<td>Dexter Bracken “The Effects of Efficacy on Activism Participation in LGBTQ+Students” Faculty Mentor: Emlee Quickel</td>
<td>Meghan Troup “Decreased Mixing Conditions during Low Oxygen Events in Long Bay, South Carolina: 2006-2014” Faculty Mentors: Erin Hackett, Diane Fribance and Roi Gurka</td>
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<td>4:00 PM</td>
<td>Christina Auth “An Evaluation of Peer Health Education Programs at a University and the Impacts on Both Students and Peer Educators” Faculty Mentor: Sharon Thompson and Jennifer Maddox</td>
<td>Edward Brown “Bright Light and Altruism” Faculty Mentor: Joan Piroch</td>
<td>Emily Forzano “Dry Weight Energy Density of Prey Fishes in the Nearshore Waters of the Upper Niagara River and Buffalo Harbor” Faculty Mentor: Derek Crane</td>
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<td>4:20 PM</td>
<td>Rachel Liming&lt;br&gt;“The Acute Effect of Different foam Rolling Speeds on Iliotibial Band Flexibility”&lt;br&gt;Faculty Mentor: Jason Smith</td>
<td>Taylor Genander&lt;br&gt;“Mindfulness Based Stress Reduction Techniques Among College Students”&lt;br&gt;Faculty Mentor: Joan Piroch</td>
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<td>4:40 PM</td>
<td>Taylor O’Hara&lt;br&gt;“Consumerism in the City: The Ways in Which Fashion is Both Limiting and Empowering in Sex and the City”&lt;br&gt;Faculty Mentor: Cynthia Port</td>
<td>Rebecca Cwalina&lt;br&gt;“Exploring the Correlation Between Personality Traits and Academic Performance”&lt;br&gt;Faculty Mentors: Deborah Breede and Wes Fondren</td>
<td>Maria Peters&lt;br&gt;“Wavelets and Image Noise Reduction”&lt;br&gt;Faculty Mentor: Menassie Ephrem</td>
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<td>5:00 PM</td>
<td>Steven Webster&lt;br&gt;“Providing America with Live Sex Dolls: Human Trafficking”&lt;br&gt;Faculty Mentor: Linda Martin</td>
<td>Molly McAllister&lt;br&gt;“Social Media’s Effect on College Enrollment and Student Decisions”&lt;br&gt;Faculty Mentor: Monica Fine</td>
<td>Willie Park&lt;br&gt;“The JOVE INITIATIVE”&lt;br&gt;Faculty Mentor: Louis Rubbo</td>
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<td>5:20 PM</td>
<td>Teresa Lickfeld&lt;br&gt;“Effectiveness of Social Skills Instruction in Young Students with Developmental Delays”&lt;br&gt;Faculty Mentor: John Delport</td>
<td>Rachel Hansen&lt;br&gt;“The Inalienable Right to a Peaceful Death”&lt;br&gt;Faculty Mentor: Amanda Grefski</td>
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2016 Undergraduate Research Competition
POSTER PRESENTATIONS
Lib Jackson Student Union - Atrium

Session I:      Tuesday, April 12, 2016, 2:30pm – 4:00pm
Session II:    Wednesday, April 13, 2016, 9:30am – 11:00am

POSTER SESSION I
Tuesday, April 12, 2016, 2:30pm – 4:00pm

JENNIFER BALLIET, Intelligence and National Security Studies (#1)
The Reconstruction of Union Pier Cruiseship Terminal in Charleston, SC
Faculty Research Mentor: Mikel Norris, Politics and Geography

HALEY CODERRE, Marine Science (#3)
Nutrient Effects on Marsh System Integrity
Faculty Research Mentor: Angelos Hannides, Marine Science

JOANNA GOLEY, Marine Science (#5)
Traces of Extreme Flood in Oxbow Lake Deposits of the Pee Dee River
Faculty Research Mentor: Zhixiong Shen, Marine Science

JONATHAN JONES, Marine Science (#7)
Stratigraphy and Geochronlogy of the Pleistocene Paleo-strand Plain in the Coast of Northeastern South Carolina
Faculty Research Mentors: Zhixiong Shen, Marine Science and Eric Wright, Marine Science

SARAH KEFFER, Marine Science (#9)
Impacts of Sand Grain Variability and Biogeochemical Activity in Coral Reef Sediment Characteristics
Faculty Research Mentor: Angelos Hannides, Marine Science

BRIANA LAWS, Biochemistry (#11)
Impact of Stage of Change and Gender on Motivation to Participate in Recreational Activity and Perceptions of Health
Faculty Research Mentor: Sharon Thompson, Health Sciences

AMY POWERS, Biochemistry (#13)
Investigating Phage Activity in Coastal Carolina University Students
Faculty Research Mentor: Paul Richardson, Chemistry and Physics

ERIC ROBLES, Biology (#16)
Short-term Memory Deficits: Study Using Fruit Fly Drosophila Alzheimer's Disease Model
Faculty Research Mentor: Fang-Ju Lin, Biology

STEVEN ROSEN, Biology (#19)
Collective Prey Capture by Juvenile Venus Flytraps (Dionaea muscipula)
Faculty Research Mentor: John Hutchens, Biology
NEHEMIAH STAFFORD, Chemistry (#23)
Comparison of Aroma Profiles Between Gluten-free and Gluten-containing Beers Using SPME in Combination with GCMS
Faculty Research Mentor: Drew Budner, Chemistry and Physics

MEGHAN STICKLE, Biochemistry (#25)
Pharmacological Analysis of ROS-mediated Neurodegeneration in C. elegans
Faculty Research Mentor: Daniel Williams, Biology

AMY WARD, Biology (#26)
Effect of Taurine on Human Huntington’s Disease using Fruit fly Drosophila Model
Faculty Research Mentor: Fang-Ju Lin, Biology and Tianyi Wu, Biology

PHILIP WEBER, Marine Science (#28)
Treatment Effects on 224Ra Production during Laboratory Sediment Equilibrations
Faculty Research Mentor: Richard Peterson, Marine Science

MICHELLE WEST, Biology (#30)
C. elegans as a Model for Galactosemia.
Faculty Research Mentor: Daniel Williams, Biology

POSTER SESSION II
Wednesday, April 13, 2016, 9:30am – 11:00am

ABBY BOYTOS, Psychology (#2)
The Effects of Religion and Career Priming on Problem-Solving Persistence in College Students
Faculty Research Mentor: Terry Pettijohn, Psychology

MEGAN EVANS, Psychology (#4)
Effects of Group Connectedness on Campus Climate among LGBTQ+ Individuals Involved in a Sorority or Fraternity
Faculty Research Mentor: Emalee Quickel, Psychology

NELDA GLAZE, Elementary Education (#6)
The Relationship between Assigned Homework and its Purposes
Faculty Research Mentor: Catherine Scott, Education

REBECCA GREEN, Marine Science (#8)
Iceberg Scours in the Gulf of Maine
Faculty Research Mentor: Jenna Hill, Marine Science

MICHAELA HARRINGTON, Marine Science (#10)
Biological Parameters and Management Strategies Used to Establish Successful Marine Protected Areas
Faculty Research Mentor: George Boneillo, Marine Science

ALECIA HOSTETTLER, Psychology (#12)
Inattentional and Change Blindness in ADHD
Faculty Research Mentors: Terry Pettijohn, Psychology and Fang-Ju Lin, Biology
VICTORIA LAMBERT, Public Health (#14)
Sleep and Stress among Undergraduates: Are there Differences by Gender, Age, or Race?
Faculty Research Mentor: Sharon Thompson, Health Sciences

AMY MOODY, Marine Science (#15)
Organic and Metal Sediment Contamination in Winyah Bay, SC
Faculty Research Mentor: George Boneillo, Marine Science

KAITLIN MOREHEAD, Psychology (#17)
Gender Differences in Antisocial Personality Traits and Behavior
Faculty Research Mentor: Andrew Terranova, Psychology

CORAL MULLEN, Marine Science (#18)
Emergence and Transport of Sediment-Dwelling Organisms over an Intertidal Oyster Reef
Faculty Research Mentor: Keith Walters, Marine Science

STEPHEN PENTON, Computer Science and Applied Mathematics (#20)
Ocean Surface Effects on Refractivity Inversions Using Genetic Algorithms
Faculty Research Mentor: Erin Hackett, Marine Science

SAMANTHA STADY, Marine Science (#21)
Synthesis of the Tricyclic Core of Flinderole C from o-Iodoaniline
Faculty Research Mentor: Bryan Wakefield, Chemistry and Physics

MEGAN TOWNSEND, Psychology (#22)
Associations between Personality and Faith with Psychosocial and Academic Adjustment
Faculty Research Mentor: Andrew Terranova, Psychology

COURTNEY WEEKS, Exercise and Sport Science (#24)
The Acute Effects of 30- and 90-Seconds of Static Stretching on Vertical Jump Performance
Faculty Research Mentor: Jason Smith, Kinesiology

KRISTINA WOODFORD, Marine Science (#27)
Monitoring of Winyah Bay in Georgetown, SC
Faculty Research Mentor: George Boneillo, Marine Science