Congratulations to ALL of our 2014 Discovery Day presenters!
This event showcased the amazing work from more than 400 students and 370 presentations.

Thank you to the mentors, judges, and volunteers of the day. Discovery Day would not happen without you. A special thank you to our event sponsors:

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**Oral/Creative presentations: Morning**

**Morning Oral/Creative presentations: Arts and Humanities**

*First place*  
**The Euphradian Society: An Intellectual Heritage**  
*Steven Vanderlip*, Political Science & English - Senior  
Dr. Jill Frank, Political Science

*Second place*  
**The Stella Adler Approach to Training a Young, Professional Actor**  
*Andrea Wurzburger*, English & Theatre - Junior  
*Kathryn Atkinson*, Marketing & Theatre - Senior  
Prof. David Britt, Theatre and Dance

**Morning Oral presentations: Social Sciences and Public Health**

*First place*  
**Identifying and Overcoming the Stigma of School Mental Health Services**  
*Alyssa Huggins*, Biological Sciences & Psychology - Senior  
Dr. Mark Weist, Psychology  
Dr. Mike McCall, Psychology

*Second place*  
**Transforming Care through Disruptive Design: Incorporating a Midwifery Model of Care into Obstetric Practices**  
*Lauren Marsh*, Psychology & Religious Studies - Senior  
Dr. Deborah Billings, Health Promotion Education and Behavior
**Morning Oral presentations: Social Sciences I**

**First place**  
*Increasing Environmental Consciousness Through Motivational Factors*  
*Haley Rabic, Public Relations & Environmental Studies - Junior*  
*Dr. Kevin Elliott, Philosophy*

**Second place**  
*Mapping Crime on the USC Campus: An Environmental Perspective*  
*Allyson Gatens, Criminal Justice & Sociology - Senior*  
*Dr. Robert Kaminski, Criminology and Criminal Justice*

**Morning Oral presentations: Social Sciences II**

**First place**  
*Domestic Violence: Where Privacy is a Silent Killer*  
*Sharita Moultrie, Social Work - Senior*  
*Dr. Susan Parlier, Social Work*

**Morning Oral presentations: Social Sciences III**

**First place**  
*Comparing Social Ties Within Assisted Housing*  
*Michael Englehart, Sociology & Political Science - Senior*  
*Dr. Shelley Smith, Sociology*

**Second place**  
*#FestivalFans: The use of social media at music festivals and its influence on brand relationship quality*  
*Rupert Hudson, International Business & Marketing - Senior*  
*Dr. Thomas Madden, Marketing*

**Morning Oral presentations: STEM I**

**First place**  
*Molecular Modeling of ssDNA-salt Interactions*  
*Katherine Driscoll, Biochemistry and Molecular Biology & Mathematics - Sophomore*  
*Dr. Mark Uline, Chemical Engineering*

**Morning Oral presentations: STEM II**

**First place**  
*Effects of Haematoloechus Infection on the Functional Response of Libellulid Odonate Naiads*  
*James Leaphart, Biology - Senior; USC Aiken*  
*Dr. Derek Zelmer, Biology/Geology; USC Aiken*

**Morning Oral presentations: USC Connect Showcase I**

**First place-Tie**  
*At the Heels of History: A Perspective of Progress & Equality from the Field*  
*Randy Moore, Social Work - Senior*  
*Dr. Susan Parlier, Social Work*  
*Mr. Ryan Wilson, South Carolina Equality; USC*

**First place-Tie**  
*A Year of Unprecedented Self Discovery*  
*Holland Stocker, German & Linguistics - Senior*  
*Dr. Kurt Goblirsch, Languages, Literatures, and Cultures*

**Morning Oral presentations: USC Connect Showcase II**

**First place**  
*Studying Abroad in South Carolina: An Appalachian Adventure in Writing*  
*Evelyn Robinson, History & English - Junior*  
*Dr. Marjorie Spruill, History*

**Second place**  
*Developing Sustainable Leaders through the Green Leadership Program: Hosting a Green Networking Breakfast*  
*Connor Bain, Computer Science & Mathematics - Junior*  
*Ms. Hayley Efland, Office of Sustainability*
**Poster/Display presentations: Morning**

**Morning Poster presentations: Arts and Humanities**

*First place*
**Practicing String and Orchestra Teachers' Perceptions of their Collegiate Practicum Experience**  
*Katie Lindler*, Music Education - Junior  
Dr. Gail Barnes, Music

**Morning Poster presentations: Biology and Biomedical Sciences I**

*First place*
**Homodimerization and Phosphorylation Control the Subcellular Localization of PDE11A4**  
*Geetanjali Pathak*, Baccalaureus Artium et Scientiae - Senior  
Dr. Michy Kelly, Pharmacology, Physiology and Neuroscience

*Second place*
**Cell-Based Delivery of Angiogenic Factors from 3-D ADSC Cultures for Vascularization of Engineered Tissues**  
*Lindsay Rucker*, Biomedical Engineering & Chemistry - Junior  
Dr. James Blanchette, Chemical Engineering

**Morning Poster presentations: Biology and Biomedical Sciences II**

*First place*
**Influence of Genes Downstream of FOXO on Lifespan of Daphnia pulex and Daphnia pulicaria**  
*Jacob Nelson*, Biological Sciences - Senior  
Dr. Rekha Patel, Biological Sciences

*Second place*
**Loss of petal initiation in Arabidopsis ant ait double mutants is not due to reduced auxin levels**  
*Olivia Haley*, Biological Sciences - Junior  
Dr. Beth Krizek, Biological Sciences

**Morning Poster presentations: Chemistry and Physics**

*First place*
**Fatty Acid Specificity of the P450 Decarboxylase OleT(JE)**  
*Megan Mitchell*, Biochemistry and Molecular Biology - Sophomore  
Dr. Thomas Makris, Chemistry and Biochemistry  
Mr. Job Grant, Biochemistry  
Mr. Chun Hsieh, Biochemistry

*Second place*
**Experimental Setup for Magnetic-Field Tests of Small-Sized Light Sensors at Jefferson Lab**  
*Cameron Nickle*, Physics & Mathematics - Senior  
Dr. Yordanka Ilieva, Physics and Astronomy

**Morning Poster presentations: Computing**

*First place*
**Affordable Medical Ultrasound Training Simulation**  
*Logan Hood*, Computer Science & Mathematics - Senior  
Dr. Jijun Tang, Computer Science and Engineering

**Morning Poster presentations: Engineering and Math**

*First place*
**Ultrathin Graphene-Based Nanofilters for Hemodialysis applications.**  
*Jacqueline Plyler*, Biomedical Engineering & Biological Sciences - Junior  
Dr. Miao Yu, Chemical Engineering
Morning Poster presentations: Environmental Sciences
First place  Climate Influence on the Phenology on Larval Shrimp in a South Carolina Estuary
Craig Raffenbarg, Marine Science - Senior
Dr. Ryan Rykaczewski, Biological Sciences

Second place  U-Pb zircon geochronology of fore-arc volcaniclastic and other rocks, Antarctic Peninsula
Jason Titus, Geological Sciences & Russian - Senior
Dr. David Barbeau, Earth and Ocean Sciences

Honorable Mention  Plume Structures in the Central Aleutian Basin
Elizabeth Yankovsky, Physics & Geophysics - Junior
Dr. Camelia Knapp, Earth and Ocean Sciences

Morning Poster presentations: Exercise Science and Physical Education
First place  Does Bright Light Improve Sleep Quality in Veterans with Combat-related Posttraumatic Stress Disorder?
Nidha Khan, Biochemistry and Molecular Biology & Medical Humanities - Junior
Dr. Shawn Youngstedt, Exercise Science

Second place  Examining the Effects of Aging and Stroke during Trail Making
Angela Ross, Exercise Science - Senior
Dr. Troy Herter, Exercise Science

Morning Poster presentations: Psychology and Communication Sciences
First place  A functional role of motor systems in action sentence comprehension: A study of stroke patients
Carl Brzorad, Psychology & Philosophy - Senior
Dr. Rutvik Desai, Psychology

Second place  Speech Properties Predicting Cochlear Implant Performance
Michael Hood, Baccalaureus Artium et Scientiae - Senior
Priya Purohit, Biomedical Engineering - Junior
Dr. Daniel Fogerty, Communication Sciences and Disorders

Morning Poster presentations: Psychology and Neuroscience I
First place  Expression of Vesicular Monoamine Transporter-2 Following Neonatal Ethanol Exposure and Chronic Amphetamine Treatment: Implications for Attention Deficit Treatment
Daniel Wood, Biochemistry and Molecular Biology & Neuroscience - Junior
Dr. Sandra Kelly, Psychology

Morning Poster presentations: Psychology and Neuroscience II
First place  Shifting the spatial representation of number across development
Emily DeFouw, Psychology & Business Administration - Senior
Dr. Melanie Palomares, Psychology

Second place  Comic World vs. The Real World
Charles Taffe, Psychology & Public Relations - Junior
Dr. Jennifer Vendemia, Psychology

Morning Poster presentations: Public Health
First place  Pregnancy and Depression: Factors associated with Depression among Pregnant Latinas
Salem Carriker, Anthropology & Biological Sciences - Senior
Dr. Myriam Torres, Consortium for Latino Immigration Studies
Morning Poster presentations: Social Sciences I
First place  Skeletal Trauma as a Result of Human Rights Abuses and Armed Conflict in the Former Yugoslavia and Guatemala
Meghan Conroy, Anthropology & Political Science - Senior
Dr. Carlina de la Cova, Anthropology

Second place  The Analytical Comparison of International Fashion Marketing
Mackenzie Caldwell, International Business & Marketing - Senior
Prof. Puri Crowe, Linguistics

Morning Poster presentations: Social Sciences II
First place  In Some Way, It Will Make a Difference: Bystander Interventions in Instances of Race-Based Bullying
Kimberly Charlton, Social Work & Counselor Education - Sophomore
Ashley Nunnally, Mathematics - Senior
Dr. Kelly Lynn Mulvey, Educational Studies

Second place  Indian Students’ Perceptions of Skin Tone
Erin Steiner, Political Science & Women’s and Gender Studies - Junior
Dr. Shelley Smith, Sociology

Morning Poster presentations: USC Connect Showcase I
First place  International Studies in Action
Sarah Abdullah, International Studies - Senior

Second place  An Ideology of Successful Leadership in Professional and Civic Engagement
Puthphirun Cheng, Biological Sciences & Spanish - Junior

Oral/Creative presentations: Afternoon

Afternoon Oral/Creative presentations: Arts and Humanities
First place  The Second Hurricane: Bringing Research to Life
Kathleen McKinney, Music Performance - Senior
Prof. Ellen Schlaefer, Music

Afternoon Oral presentations: Social Sciences and Public Health
First place  A sustainable after-school gardening program that emphasizes nutrition and environmental education
Leila Heidari, Baccalaureus Artium et Scientiae - Senior
Dr. Christine Blake, Health Promotion Education and Behavior

Second place  Mental Health America
Caitlin Cribbin, Social Work - Senior
Dr. Susan Parlier, Social Work

Afternoon Oral presentations: Social Sciences I
First place  The Influence of Study Abroad in South Africa on American Students’ Identity
Madeline Willett, Spanish - Sophomore
Dr. Andrea Tanner, Journalism and Mass Communications
Dr. Jennifer Engel, Study Abroad Office
Second place  Latina Motherhood in the US: Stories of Hardship and Triumph  
*Mallory Turner, Baccalaureus Artium et Scientiae - Senior*  
Dr. Deborah Billings, Health Promotion Education and Behavior

**Afternoon Oral presentations: Social Sciences II**

*First place*  
The Impact of Perceived Characteristics of Teenage Mothers on Attitudes Toward Teenage Pregnancy  
*Shalise Bowens, Psychology & Education, General - Junior*  
Dr. Suzanne Swan, Psychology  
Mr. Andrew Schramm, Psychology

*Second place*  
An Examination of Bug Bounty Programs in E-commerce  
*Jonathan Larry, Business Administration - Senior; USC Aiken*  
Dr. Ravi Narayanaswamy, Business Administration; USC Aiken  
Dr. Leanne McGrath, Business Administration; USC Aiken

**Afternoon Oral presentations: STEM I**

*First place*  
Developing a Novel Chitosan Coating with Silver Nanoparticles and Antibiotics for Titanium Implants  
*Kathryn Kingsmore, Biomedical Engineering & Spanish - Senior*  
Dr. Mauris DeSilva, Naval Medical Research Unit - San Antonio

*Second place*  
Controlling the Generic Formal Fiber of Local Domains and Their Polynomial Rings  
*Anna Kirkpatrick, Mathematics - Junior*  
Prof. Susan Loepp, Williams College, Mathematics and Statistics

**Afternoon Oral presentations: STEM II**

*First place*  
The effect of a high sucrose diet on cognition in rats  
*Rachel Roberts, Biology - Senior; USC Aiken*  
Dr. Michelle Vieyra, Biology/Geology; USC Aiken

**Afternoon Oral presentations: STEM III**

*First place*  
Small mammal community structure within urban greenways  
*Samantha Poarch, Biology - Senior; USC Upstate*  
Dr. Jonathan Storm, Natural Sciences & Engineering; USC Upstate

*Second place*  
Multi-decadal hindcasts of larval connectivity  
*Hilde Oliver, Mathematics & French - Senior*  
Dr. David Wethey, Biological Sciences

**Afternoon Oral presentations: USC Connect Showcase**

*First place*  
B.G.L.S.A. (Becoming a Gay Leader at a Southern Academy)  
*Mason Lee Branham, Psychology & Theatre - Senior*  
Ms. Kayla Lisenby, Multicultural Student Affairs
Poster/Display presentations: Afternoon

Afternoon Poster presentations: Arts and Humanities
First place  Lights, camera, action: evaluating the portrayal of pharmacists in film and television
Amy Yanicak, Pharmacy & Public Health - Senior
Lindsay Waddington, Pharmacy - Senior
Gabrielle Furgiuele, Pharmacy - Senior
Philipp Monterroyo, Pharmacy - Senior
Shiva Tavassoli, Pharmacy - Junior
Alyssa Chappell, Pharmacy - Junior; USC Columbia
Dr. P. Brandon Bookstaver, Clinical Pharmacy and Outcomes Sciences
Dr. Phillip Mohorn, Clinical Pharmacy and Outcomes Sciences

Afternoon Poster presentations: Biology and Biomedical Sciences I
First place  Determining the role of target site duplication sequences on the transposition of MITEs
David Gilbert, Biology - Sophomore; USC Aiken
Dr. C. Nathan Hancock, Biology/Geology; USC Aiken

Second place  Turnover of Protein Succination in Adipocytes
Hannah Faile, Biological Sciences - Senior
Dr. Norma Frizzell, Pharmacology, Physiology and Neuroscience

Afternoon Poster presentations: Biology and Biomedical Sciences II
First place  Cloning a retroviral vector to express anti-HIV RNAs
Crystal Ryan, Biology - Senior; USC Aiken
Dr. William Jackson, Biology/Geology; USC Aiken

Second place  The cellular effects of HIV-1 Tat-dependent expression of pro-apoptotic tBid and Bax
Claudia Fulmer, Biology - Senior; USC Aiken
Dr. William Jackson, Biology/Geology; USC Aiken

Afternoon Poster presentations: Chemistry and Physics
First place  Observation of Natural and Artificial Magnetic Tape Aging Using Acid Titration and Infrared Spectroscopy
Tanya Jones, Chemistry & Biological Sciences - Senior
Abigail Snyder, Biological Sciences & Criminology and Criminal Justice - Junior
Eric Bringley, Chemical Engineering & Chemistry - Sophomore
Andrew Fogner, Chemistry & Spanish - Senior
Nichole Witten, Chemistry & Mathematics - Sophomore
Dr. Stephen Morgan, Chemistry and Biochemistry

Second place  Synthesis of carbohydrate porphyrin conjugates via palladium-catalyzed Buchwald-Hartwig reactions
Elizabeth Baker, Biology - Senior; USC Upstate
Dr. Joshua Ruppel, Natural Sciences & Engineering; USC Upstate

Afternoon Poster presentations: Computing
First place  Utilizing Activity and Context Recognition to Mitigate Distractions from Smart Devices
Connor Bain, Computer Science & Mathematics - Junior
Dr. Srihari Nelakuditi, Computer Science and Engineering
Second place

IT Capstone Project – Web design and development for Poetik Kakes, an entrepreneurial Columbia firm.

Will Simons, Integrated Information Technology - Senior
Travis Witherspoon, Integrated Information Technology - Senior
Mark Herrmann, Integrated Information Technology - Senior
Chris Miller, Integrated Information Technology - Senior
Brian Simmons, Integrated Information Technology - Senior
Dr. Karen Patten, Retailing

Afternoon Poster presentations: Engineering and Math

First place
Modeling the impact of control strategies against West Nile virus
Patrick Niehaus, Computational Science - Senior; USC Beaufort
Dr. Kasia Pawelek, Mathematics; USC Beaufort

Second place
Shear Strength of Affordable and Sustainable Earth Masonry for Seismic Resistant Houses in South Carolina
Narong Phal, Civil Engineering - Senior
Dr. Fabio Matta, Civil and Environmental Engineering

Afternoon Poster presentations: Environmental Sciences

First place
Effects of Varying Pigmentation on White Syndrome Severity in Acropora hyacinthus
Daniel Utter, Marine Science & Chemistry - Junior
Dr. Pamela Morris, Marine Science

Second place
Assessing the ability of an in situ fluorescence probe to monitor dissolved organic carbon dynamics in estuarine waters
Alexandra Norelli, Marine Science & Art Studio - Sophomore
Dr. Erik Smith, Baruch Institute for Marine & Coastal Sciences

Afternoon Poster presentations: Exercise Science and Physical Education

First place
The Effect of Sleep Deprivation on Glucose Metabolism
Julian Greer, Exercise Science & Medical Humanities - Senior
Dr. Xuewen Wang, Exercise Science

Second place
The Effect of Unloading and Irradiation on Skeletal Muscle Protein Turnover
Matthew Augustine, Exercise Science - Senior
Dr. James Carson, Exercise Science

Afternoon Poster presentations: Psychology and Communication Sciences

First place
Developing an Efficient, Valid, and Reliable Assessment of High School Vocabulary
Sheida Abdi, Psychology & Communication Sciences and Disorders - Senior
Dr. Suzanne Adlof, Communication Sciences and Disorders

Second place
Variations in Working Memory Predict Pauses and Disfluencies in Language Production
Jeong Hyun Lim, Psychology & Neuroscience - Junior
Dr. Fernanda Ferreira, Psychology

Afternoon Poster presentations: Psychology and Neuroscience I

First place
Effect of reading ability on the neural mechanisms of attention: an electroencephalography study
Kristina Drake, Biomedical Engineering & Neuroscience - Senior
Dr. Jessica Green, Psychology

Second place
Logo Recognition in Young Adults
Lauren Knapp, Psychology & Journalism and Mass Communications, Advertising an - Junior
Dr. Melanie Palomares, Psychology
Afternoon Poster presentations: Psychology and Neuroscience II
First place  The Misuse of Stimulant Medication Among College Students: A Review of the Literature  
Kari Benson, Psychology & Counselor Education - Junior  
Dr. Kate Flory, Psychology  
Second place  Conversing with Friends and Strangers: A Sociolinguistic Approach  
Karen Shebuski, Psychology - Senior  
Dr. Amit Almor, Psychology  

Afternoon Poster presentations: Public Health
First place  Oral hygiene knowledge and practices of adults in rural India  
Nina Panvelker, Biological Sciences - Junior  
Dr. Christine Blake, Health Promotion Education and Behavior  
Second place  Identifying Opportunities to Develop Effective HPV and HPV Vaccination Materials at the University of South Carolina  
Rosemary Corriero, Biological Sciences & Health Promotion, Education, and Behavior - Senior  
Dr. Heather Brandt, Health Promotion Education and Behavior  
Dr. Shalanda Bynum, Uniformed Services University of the Health Sciences; USC  
Dr. Jessica Bellinger, Health Services Policy and Management  

Afternoon Poster presentations: Social Sciences I
First place  Against all odds: the Psychology behind the Czech rebellion against Soviet Occupation  
Carl Brzorad, Psychology & Philosophy - Senior  
Dr. Doyle Stevick, Educational Leadership and Policies  
Second place  International Study of Financial Literacy Effects on College Students’ Consumer Behavior  
China Thomas, Economics & German - Senior  
Dr. Jason Carpenter, Retailing  

Afternoon Poster presentations: Social Sciences II
First place  The Art of Children’s Storytelling  
Victoria Graves, Early Childhood Education - Senior  
Dr. Cynthia Colbert, Art  
Dr. Sabina Mosso-Taylor, Instruction and Teacher Education  

Afternoon Poster presentations: USC Connect Showcase I
First place  A study about EcoReps and their presence on campus  
Zil Shah, Biological Sciences & Psychology - Senior  
Second place  Competing to Win: The Process of Competing for a National Fellowships  
Davontae Singleton, English & Education, General - Junior