# UNDERGRADUATE RESEARCH SYMPOSIUM 2014: SESSIONS AT A GLANCE

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
<th>Topic</th>
</tr>
</thead>
<tbody>
<tr>
<td>12:00 to 1:00 pm</td>
<td></td>
<td></td>
<td>Registration: Check-in at 4th floor lobby</td>
</tr>
<tr>
<td>1:00 pm to 1:20 pm</td>
<td></td>
<td></td>
<td><strong>Opening Session:</strong> Alderson Auditorium</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Welcome:</strong> John Augusto, Center for Undergraduate Research</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Opening Remarks:</strong> Chancellor Bernadette Gray-Little</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Presentation of Awards:</strong> ACE Research Talks</td>
</tr>
<tr>
<td>1:30 pm to 2:30 pm</td>
<td>Session 1: ACE Talks</td>
<td>Alderson Malott</td>
<td>ACE Research Talks, sponsored by James K. Hitt Award, University Honors Program</td>
</tr>
<tr>
<td>2:45 pm to 3:45 pm</td>
<td>Session 2</td>
<td>Malott Big 12</td>
<td>Interdisciplinary 1, Social Science 1, Student Prep Room, STEM 1, Building Spaces: Building Ideas, Interdisciplinary 2, Creative Works, Posters: STEM, Getting Started in Research Panel</td>
</tr>
<tr>
<td>3:45 pm to 4:15 pm</td>
<td>Session 3</td>
<td>Malott Big 12</td>
<td>Interdisciplinary 3, Social Science 2, Student Prep Room, STEM 2, Humanities, STEM 3, Posters/Displays: Interdisciplinary, Getting Started in Research Panel</td>
</tr>
<tr>
<td>5:30 pm to 7 pm</td>
<td></td>
<td></td>
<td>Banquet: Ballroom</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Welcome:</strong> John Augusto, Center for Undergraduate Research</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Presentation of Awards:</strong> K. Barbara Schowen Undergraduate Research Mentor Award, Outstanding Presentation Awards</td>
</tr>
</tbody>
</table>
Undergraduate Research Symposium Program  
Saturday, April 26, 2014  
University of Kansas, Kansas Union

12:00 – 12:50 – Registration (sign-in & name tags) – 4th Floor Lobby

1:00 – 1:20 – Opening Session – Alderson Auditorium

Welcome: John Augusto, Center for Undergraduate Research

Opening Remarks: Chancellor Bernadette Gray-Little

Presentation: ACE Research Talk Winners

1:20-1:30 – Break

1:30-2:30 – Session 1: ACE Research Talks

ACE Research Talks, sponsored by the James K. Hitt Award, University Honors Program

Alderson Auditorium:

1:30: Gavin Hanson, The Role of Attention in Goal-Directed Semantic Retrieval: Evidence from Multi-Voxel Pattern Analysis
1:50: Megan Nelson, Tipping: An Economic Anomaly
2:10: Mitchell Newton, Utilizing Microdialysis and Electrocortiography to Understand Seizure Activity in the Brain

ACE Research Talks, sponsored by the Center for Undergraduate Research

Malott Room:

1:30: Josh Russell, Resources and Educational Outcomes: A Look at Kansas and Missouri Public Schools
1:50: Rachel Cross, Ecopoetics and the Academic Ecosystem: A Step-by-Step Guide for the Anti-Colonialist
2:10: Alex Kong, Evaluating Derivatives of Vitamin E as Therapeutic Agents for Alleviating
Lysosomal Trafficking Defects Associated with Neurodegenerative Diseases

2:30-2:45 – Break

2:45-3:45- General Session 2

Undergraduate Student Panel: “Getting Started in Research”

Pine Room
Moderator: Dyan Morgan, Center for Undergraduate Research
Student Panelists:
  Greg Ervin, Interdisciplinary Computing, Biology
  Alex Kong, Pharmacy
  Schuyler Kraus, Environmental Studies

Performances/Creative Works:

Hawk’s Nest (First floor):
  2:45: Tasha Cerny, Princess Poetics: (re)Defining Disney's Social Constructs
  3:05: Magge Boyles, Women of the Yiddish Stage
  3:25: Natalie Sabillon, Jip the Zebra Children's Book Creation

Oral Presentations:

Big 12: Social Science 1
  2:45: Jake Thompson, Dissociating Cognitive and Affective Empathy
  3:00: Max Bearce, Japanese Internment as Collective Memory: Implications on Identity and Identity-Related Outcomes
  3:15: Jeffery Durbin, The Role of Morphemes in Novel Compound Recognition
  3:30: Danielle Siebert, Perception of Religious Discrimination in Judgments of Law Enforcement Behavior

Malott Room: Interdisciplinary 1
  2:45: Hannah Duff, Mining Peru: Robbing Resources or Sustaining Livelihoods?
  3:00: Allison Williams, Natural Gas, A Foundation Fuel for the Future: Inconsistencies and Themes in Hydraulic Fracturing Data
  3:30: Hannah Jayne, Sex Education of the US Military: A Rhetorical Analysis of WWII Propaganda

Centennial Room: STEM 1
  2:45: Mackenzie Bloom, Improving Transfection Efficiency via Nucleofection with Umbilical Cord
Stem Cell Concentration

3:00: Kyle Lockhouse, Ashes to Ashes: The Survey of the Fraxinus Pennsylvanica on the University of Kansas’s Campus

3:15: Caleb Christianson, Development of Custom Staggered Herringbone Microfluidic Chips for Rapid Mixing of Liposomes and Stable Nucleic Acid Lipid Particles

3:30: Holly Lafferty, Hunger Games: Isotope Ratios in Nutrient Stressed Fish

English Room: Building Spaces, Building Ideas

2:45: Adeola Adewale, First Texans Museum, Dallas: Deconstructing the Native American Dwelling Stereotype

3:00: John Stolzle, The Digital Medium: evolving pedagogies

3:15: Corey Boucher, Creating a ‘Homeplace’ in Temporary Living Environments: Residents’ Evaluation of KU Scholarship Halls

3:30: Nicholas Colbert, First Texans Museum - Dancing Informs Design

Jayhawk Room: Interdisciplinary 2

2:45: Melanie Funk, Dimensions of Trust: A Grand Isle, Louisiana Study

3:00: Matthew Hobart, Logging on to New Identities in Contemporary Art: Identity, the Internet and Ambiguity in the Work of Jayson Musson

3:15: Jamie Fuller, Exploring discrepancies between development discourse and social realities in Dakar, Senegal

3:30: Candice L’Ecuyer, Atrazine in our Drinking Water: What is Acceptable and How it is Determined

Poster Session: STEM

Kansas Room:

Thomas Anneberg, Resolving the subspecies status of Drosophila americana americana and Drosophila americana texana.

J. Frank Auten, Microtubule Inactivation with the Drug Paclitaxel

Jeff Bauman, Integration of Microfluidics into Analytical Chemistry Instrumental Analysis Laboratory: Microchip Electrophoresis with Electrochemical Detection for Quantitation of Nitrite in Cured Meat Samples

Tyler Berry, Dielectric Measurements Using A Vector Network Analyzer For Greenland And Antarctica Ice Core Samples

Taylor Broadhead, Acoustic Analysis of a New Species of Shrub Frog in the Genus Platymantis


Kimberly Cole, The Differences between the Knee Lowest Point Translations of Three Simulated Walking Profiles

Marika Crider, Comparison of Intact and Meniscectomy Passive Knee Laxity in Cadaveric Specimens

Erin Evans, Separation optimization of biogenic amines present in C. elegans using microchip and
capillary electrophoresis

Erin Evans, Effect of calcium free seawater and p-aminobutyric acid on development of Dendraster excentricus and Strongylocentrotus purpuratus

Cori Fain, Effects of ethynylestradiol on sea urchin embryonic development: adverse effects at relevant oceanic concentrations

Ashley Farris, A Comparison of Two Polymers for Application in 3D-Printed TMJ Implants

Marcus Florez, Investigation of Genetic Links to Alzheimer’s Disease: Analysis of APOE, TOMM40 and Mitochondrial Genome

Alexander Fondaw, The Electricidal Effect - The Treatment of Staphylococcal and Pseudomonal Biofilms Using Low Intensity Exposure to Electrical Current Via Platinum Rods

Joseph Greenbaum, Investigating Biological Crosstalk using Boolean Networks

Ibrahim Gul, Change in Range of Motion envelope of the back and the development of Low back pain

Emily Haynes, Modular tripeptide carrier for targeted molecular imaging with copper

Brad Hutchison, Characterization of the P1 Domain of PvdJ P1 from Pseudomonas aeruginosa

Valerie Paul, Disruption of development of C. elegans through manipulation of canonical Wnt pathways

Pann Pichetsurnthorn, Dual-Electrode Electrochemical Detection for Microchip Electrophoresis: Voltammetric Identification of Chemically Labile Species

Betsy Ramirez, Isolation and Crystallization of PvdJp2, a Non-Ribosomal Peptide Snyhetase Domain in Pseudomonas aeruginosa

Julio Ramirez, Shielding Effect of Asexual Reproduction on Mutation Load

Kayla Sale, Evolutionary history underlies plant physiological responses to global change since the Last Glacial Maximum

Abigail Schletzbaum, Numerical Bifurcation Analysis of Climate Change Models

Hadley Sis, Experimentally Analyzing Viscous Fingering Between Microbicide Delivery Gel And Simulated Biological Fluids

Emily Smith, Monte Carlo Modeling of Generator Level Single Top Quark Production in Association with the Higgs Boson

Connor Stultz & Leah Wainstock, Comparative Tadpole Morphology

Bryce Tappan, Reactivity and Photoluminescence Studies of Mercaptoazulenes and Their Complexes with Gold (I)

Anna Tatarko, Investigating the effects of tallgrass prairie restoration and plant diversity on pollinator communities in northeast Kansas

Julia Yang, Understanding microbial response to temperature and relative C and N availability in boreal organic soils

3:45-4:15 – Info Session/Break

Join us in the 4th floor Lobby for snacks, informational tables, and a chance to take your photo with your friends, labmates, mentors, and family.
4:15-5:15- General Session 3

Undergraduate Student Panel: “Getting Started in Research”

Pine Room
Moderator: Dyan Morgan, Center for Undergraduate Research
Student Panelists:
  Greg Ervin, Interdisciplinary Computing, Biology
  Alex Kong, Pharmacy
  Casey Pederson, Psychology

Oral Presentations:

Big 12: Social Science 2
4:15: Sarah Ekis, Influence of Children’s Misarticulation on Preschoolers' Word Recognition
4:30: Kristina Van Anne, The Role of Lexical Stress in the Word Recognition of English-speaking L2 learners of Spanish
4:45: Meritt Schenk, Behavioral Science Goes to the Arcade: A Translation of the Generalized Matching Law to Predict and Analyze Human Performance in a Simulated Environment
5:00: Seth Brooks, Female Inhibitedness: The Interaction of Interest and Female Sending of False Cues

Malott Room: Interdisciplinary 3
4:30: John Stolzle, Economics of GMOs and The Transgenic Model
4:45: Mugabi Byenkya, No Man’s Land: An analysis of the sustainability of Uganda’s national parks system
5:00: Kira Monet Alexander, Sexual Health Social Policy: Dogma, Responsibility, and Consequences

Centennial Room: STEM 2
4:15: Sam Buchanan, Active-Target Multistatic Receiver Digital Section for CReSIS Radar Calibration
4:30: Seth Polsley, Control System Based on Electromyography
4:45: Alina Zheng & Amy Zheng, Neutrino Detection Using Surface Wave
5:00: Daniel Muccino, Quantifying Diffusion in All-Solid-State Lithium-Ion Batteries
English Room: Humanities
4:15: Candice Crafton, The Marginalization of Midwives
4:30: Kayla Overbey, A Cultural Comparison of 19th-20th c. American and British Children's Literature
4:45: Sean Weston, Protestants and Poverty in Pittsburg, Kansas: 1890-1900
5:00: Joel Bonner, Bringing the Intellectual and Personal Benefits of Epic Literature to Children

Jayhawk Room: STEM 3
4:15: Adam Miltner, How MAB-5 Drives Posterior Migration of the Q Neuroblasts in the Model Organism Caenorhabditis elegans
4:30: Jordan Koch, Calculating Probabilities of Parsimony-Uninformative Patterns on Phylogenetic Trees
4:45: Kendra Marr, The Good, the Bad, and the Ugly: Factors that Contribute to Eggshell Defects in a Strain of Drosophila virilis That Carries a High Transposon Load

Poster/Displays Session: Interdisciplinary

Kansas Room:

Alex Beck, Raisha Basnyat, & Chris Cooper, Water Quality on Jayhawk Boulevard
Courtney Crites, Spatial Discrimination Enforces Patriarchy and Determines Morality
Michaelyn Everhart, Examining the Effects of Reading Fiction on Empathy
Austin Griffis, Native Texans Cultural Center Design: A metaphorical and contextual interpretation of Native American Experience
Marcella Hangen, Stability of Preschooler’s Preference for and Reinforcing Efficacy of Edible and Leisure Items
Rebecca Howard, Influence of synthesized vowel sounds on neural processing of speech perception
Clint Jensen, Considering the Impact of Analogical Associations on Learning
John Robert Jones, IPA Study
Joseph Keusenkothen, Christina Baker, Will Penner, & Sam Oberkrom, Where We’re Going we Don’t Need Roads... We need Bike Paths!
Schuyler Kraus, An Inquiry into the Authenticity of Cleveland Ecovillage
Nick Malley, 86’d - A Short Film
Austen McGuire, Mental Strength's Effect on the Perception of Aurally and Visually Looming Objects
Ruben Medina, Youngsters' Perceptions of the Motivational Climate in Their Recreational Exercise Classes
Kristin Miller, Increasing Child Compliance with Essential Routine Procedures: Acquisition, Generalization, & Maintenance
Julia Nehring, The potential of milkweed floss as a natural fiber in the textile industry
Benjamin Neitzel, Effects of Sexual Arousal on Commitment: The Moderating Role of Threat
Steven Reyes, First Texans Museum in Dallas Arts District of Texas: A Contemporary
Interpretation of the Kiva
Adrian Rivera, Subliminal Attachment Security Priming’s Effect on Sexual Strategy Preference
Eric Rivera, Quantifying CO₂ Removal in Living Walls: A Case Study of the Center for Design Research
Elisa Rombold, First Texans Museum
Chloe Seim, M, an Illustrated Novella
Yichi Zhang, Sleep Disruption as a Mediator between Test-taking Anxiety and Exam Performance

5:15-5:30 – Break

5:30 – Symposium Banquet, Kansas Room

Welcome: John Augusto, Center for Undergraduate Research

Presentation of Awards:
K. Barbara Schowen Undergraduate Research Mentor Award (faculty)
Undergraduate Research Mentor Award (grad student/staff)
Outstanding Presentation Awards