Dear Student Researchers, Faculty Mentors, and Guests,

What a privilege it is to welcome you to NAU’s Undergraduate Symposium as we celebrate its eighth year as a university point of pride. I am especially gratified to know that all of our colleges are represented here today, demonstrating our university-wide commitment to undergraduate experience in research and service learning.

The individual and collaborative projects on display today in the Skydome and duBois Center are shining examples of academic excellence and student success. I’m sure the levels of creativity and innovation are matched only by the energy of the students. It is also important to see disciplines such as art and creative writing occupying their rightful place beside the sciences.

As always, the work of our students and faculty thrives on the support of donors and sponsors, and we are grateful to all of them. I also urge students to remember and acknowledge the support they have received from families and friends, not only for this event, but for all that has led up to it.

I congratulate everyone involved in producing nearly 1,000 posters, presentations, and exhibits, and extend my best wishes to each of the students and their faculty mentors. This is truly a community celebration of a university-wide effort. What a proud day for all of us.

Sincerely,

Rita Cheng
President
Dear Students, Faculty Colleagues, and Guests,

Today NAU is celebrating its 8th annual university-wide Undergraduate Symposium which showcases our undergraduate students’ efforts in research, scholarship and artistic endeavors. Through the enthusiastic efforts of faculty and student collaborations, this Symposium has grown over the years to now fill the Walkup Skydome. I am excited that NAU is highlighting the diversity of our students’ scholarship and creative outcomes under one roof, and I applaud their academic and creative achievements.

Thank you for joining me and the NAU and Flagstaff communities in congratulating these students and wishing for their future success.

Sincerely,

William Grabe, Ph.D.
Vice President for Research
Table of Contents

Special events for the week of April 21-27
   College of Arts and Letters .................................................. 4
   Hooper Poster Presentations & Reception Special Event ........ 5

Morning Session
   Non-poster listings ................................................................. 6
   Poster listings ........................................................................ 13

Luncheon and Awards Ceremonies ............................................. 31

Afternoon Session
   Non-poster listings ................................................................. 32
   Poster listings ........................................................................ 39

Accessibility Information .......................................................... 57

Thank You ................................................................................. 58

Search for presenters, titles, and abstracts at the event kiosks or online at nau.edu/symposium

Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAL</td>
<td>College of Arts and Letters</td>
</tr>
<tr>
<td>CEFNS</td>
<td>College of Engineering, Forestry, and Natural Sciences</td>
</tr>
<tr>
<td>COE</td>
<td>College of Education</td>
</tr>
<tr>
<td>HHS</td>
<td>College of Health and Human Services</td>
</tr>
<tr>
<td>FCB</td>
<td>The W. A. Franke College of Business</td>
</tr>
<tr>
<td>SBS</td>
<td>College of Social and Behavioral Sciences</td>
</tr>
<tr>
<td>UC</td>
<td>University College</td>
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</table>
College of Arts and Letters: Special Events for the week of April 19-26

All College of Arts and Letters (CAL) special events for the Undergraduate Symposium listed below are in the Performing/Fine Arts Building (#37) on the NAU campus.

All events are free unless marked “$admission.” Most tickets can be purchased through NAU Central Ticketing or at the door.

**Sunday, April 19, 2015: Chamber Orchestra Concert**
- 3:00pm - 5:00pm
- Nativity of the Blessed Virgin Mary Church (16 W. Cherry Ave)

**Monday, April 20, 2015: ECO Fashion Show**
- 6:30pm - 8:30pm
- DuBois Center

**Tuesday April 21, Thursday April 23, and Friday April 24, 2015: BFA Show**
- 10:00am - 5:00pm
- Beasley Gallery, Performing and Fine Arts Building (#37)

**April 22-28, 2015: NAU Theatre presents “The School for Lies”**
In this David Ives adaption of Moliere’s The Misanthrope, 17th century farce is blended with 21st century vernacular that will leave you dizzy from laughter!
- Wednesday - Saturday, 7:30pm; Sunday, 2:00pm
- Studio Theatre
- $admission

**Friday, April 24, 2015: NAU Percussion Ensemble Concert**
- 7:30pm
- Ardrey Memorial Auditorium

**Saturday, April 25, 2015: Student Wind Chamber Concert**
- 10:00am
- Ashurst Hall

**Saturday, April 25, 2015: Vocal Jazz Night**
- 7:30pm
- Ardrey Memorial Auditorium

**Sunday, April 26, 2015: NAU String Chamber Recital**
- 7:30pm
- Ashurst Hall

**Sunday, April 26, 2015: Spring Festival of Choirs**
- 3:00pm
- Ardrey Memorial Auditorium
- $admission

**Friday, April 24, 2015: CAL Oral and Poster Presentations**
- Undergraduate Symposium
- J. Lawrence Walkup Skydome

**Friday, April 24, 2015: School of Art BFA Exhibition Reception and Scholarship Awards**
- 5:00pm - 7:00pm
- Beasley Gallery, Room 216, Performing and Fine Arts Building (#37)
The Office for Undergraduate Research & Creative Activity celebrates this year’s Hooper Undergraduate Research Award recipients, with special guest, Dr. Henry O. Hooper, retired NAU associate provost for academic affairs and physics professor emeritus.

Wednesday, April 22, 2015 | 6:00pm-7:30pm
Applied Research & Development, Building 56, Atrium

2014-15 Hooper Undergraduate Research Award (HURA) Recipients

- Dylan Barbera: Event Related Potential Correlates of Self/Other Differences (Mentor: Chad Woodruff)
- Rebecca Beers: Paleo-environment Reconstruction and Origins of the Chalk Canyon Formation Ash (Mentor: Nancy Riggs)
- Shelby Burton: Student-Professor Rapport, Perceived Autonomy Support, and Course Outcomes (Mentor: Meliksah Demir)
- Rae Byars: A Geologic Inquiry of Upper Lake Mary’s Rising Turbidity Levels, and the Effects on the Reservoir’s Water Quality (Mentor: Abe Springer)
- Larrea Cottingham: The Effect of a Stand Replacing Fire on Ectomycorrhizal Fungi Inoculum Potential (Mentor: Catherine Gehring)
- Taran DePaola: Event-Related Desynchronization Correlates of Self-Other Differences (Mentor: Chad Woodruff)
- Daniel DePinto: Effects of Ponderosa Pine Biochar in Arizona’s Agricultural Soil: Water Retention, Drought Resistance, and Crop Yields (Mentor: Matthew Bowker)
- Garrett Erickson: Flow Relations of the Hoxworth Springs (Mentor: Abe Springer)
- James Franklin & Ryan Hogan: Ectoparasitism and Vector-Borne Pathogens in Northern Arizona Predator-Prey Cycles: Eupiotozoological Risk to Reintroduced Black-footed Ferrets (Mustela nigripes) (Mentor: Nathan Nieto)
- Chelsey Gardner: Explicit Vocabulary Instruction Embedded in Narrative Intervention (Mentor: Trina Spencer)
- Kaylyne Gray: Developing Positive Transgender Identity: A Qualitative Study of Identity (Mentor: Andrew Walters)
- Caroline Herrera: Objectively Assessing the Efficacy of Kinesio Tape to Reduce Swelling in Anterior Talofibular Sprains (Mentor: Scot Raab)
- Josiah Huggins: Academic Dishonesty as Moderated by Anonymity (Mentor: Nora Dunbar)
- Yordano Jimenez: When is a C-start Not a C-start? Escape Behavior in the English Sole (Mentor: Alice Gibb)
- Hailey Kaus: Injury History Versus Current Fitness Baseline in Female Club Gymnasts (Mentor: Scot Raab)
- Eloisa Lewis: C.S. Peirce, Artificial Intelligence, and Systems of Representation (Mentor: Jeffrey Downard)
- Ben Luginbuhl & Brett Cutler: Investigation of Plant-Derived Carbon Aerogels for Use in Multifunctional EDLCs (Mentor: Cindy Browder)
- Brittany Meucci: A Comprehensive Study of Two Columnar Jointing Locations to Determine Differences in Rate of Cooling (Mentor: Nancy Riggs)
- Dylan Mills: A New Large Armored Fish from the Devonian (380 Ma) Martin Formation of Mount Elden (Mentor: David Elliot)
- Cedar Mitchell: Using Genetic Fingerprinting to Understand the Source and Dynamics of Human Plague Infections in Madagascar (Mentor: David Wagner)
- Jillian Mondrow & Ella Stephens: Arthropod Pollinators Influence the Pollination Nature of Angiosperms along the C. Hart Merriam (Mentor: Neil Cobb)
- Alden Netto: Seismic Analysis of the San Francisco Peaks (Mentor: Ryan Porter)
- Michael O’Reilly: Using Growth Releases to Identify Disturbance Events in Southwestern Dry Mixed-Conifer (Mentor: Andrew Sanchez Meador)
- Liliana Ortiz: Genetic Variability and Population Structure of Wedge-Tailed Shearwater (Mentor: Russell Benford)
- Inez Fabian: Manipulation of the L-Arginine Pathway by Toxoplasma gondii (Mentor: Fernando Monroy)
- Victoria Pocknell: Priming a Behavioral Freeze Response in Humans (Mentor: Michael Alban)
- Megan Saalfeld: Magmatic Processes Revealed by Crystal Texture of Mount Elden, Northern Arizona (Mentor: Carrie Brugger-Schorr)
- Tara Steadman: Using Electrolyte Leakage Measurements and Assess Cold Hardiness in Southwestern White Pines (Pinus Strobiformis) (Mentor: Kristen Waring)
- Justin Wilgus: Seismicity and Tectonics of the West Kaibab Fault Zone, Arizona (Mentor: David Brumbaugh)
- Amy Ziems: Effects of Estrogen on Resistance to Oxidative Stress (Mentor: Tinna Traustadottir)
# MORNING SESSION

**Non-poster listings** 9:00am-11:00am - Exhibit

## Skydome CAL floor

<table>
<thead>
<tr>
<th>Time</th>
<th>Exhibit</th>
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<tbody>
<tr>
<td>9:00am - 11:00am</td>
<td><strong>Seeing the Portrait</strong> - CAL, Art</td>
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<tr>
<td></td>
<td>Elizabeth Schauer</td>
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<tr>
<td>9:00am - 11:00am</td>
<td><strong>A Painterly Professional</strong> - CAL, Art</td>
</tr>
<tr>
<td></td>
<td>Kimberly O’Hara</td>
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<tr>
<td>9:00am - 11:00am</td>
<td><strong>A Moment in Time</strong> - CAL, Art</td>
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<tr>
<td></td>
<td>Danielle Mierzwa</td>
</tr>
<tr>
<td>9:00am - 11:00am</td>
<td><strong>Landscape Painting</strong> - Honors, Honors Program</td>
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<tr>
<td></td>
<td>Emily Wisniewski</td>
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</tbody>
</table>

## Skydome COE Table

<table>
<thead>
<tr>
<th>Time</th>
<th>Exhibit</th>
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</thead>
<tbody>
<tr>
<td>9:00am - 11:00am</td>
<td><strong>Why We Left</strong> - COE, Ethnic Studies</td>
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<tr>
<td></td>
<td>Corrine Jarnagin</td>
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## Skydome Honors Table

<table>
<thead>
<tr>
<th>Time</th>
<th>Exhibit</th>
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<tbody>
<tr>
<td>9:00am - 11:00am</td>
<td><strong>The Struggle of Hierarchy Within</strong></td>
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<tr>
<td></td>
<td><strong>Breaking Bad</strong> - HONORS, Honors Program</td>
</tr>
<tr>
<td></td>
<td>Matthew Parrish</td>
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</table>

## Skydome SBS Table

<table>
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<tr>
<th>Time</th>
<th>Exhibit</th>
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<tbody>
<tr>
<td>9:00am- 11:00am</td>
<td><strong>Environmental Crime</strong> - SBS, Criminology and Criminal Justice</td>
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<tr>
<td></td>
<td>Katelyn Bednar, Elizabeth Lozano, Victoria Davis, David Golle, Kyle Grove</td>
</tr>
<tr>
<td>9:00am- 11:00am</td>
<td><strong>Gangs</strong> - SBS, Criminology and Criminal Justice</td>
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<tr>
<td></td>
<td>Morgan Lane, Rayele Sherlock, Kimberlyn Carovillano, Morgan Nells, Monika Fennell</td>
</tr>
<tr>
<td>9:00am- 11:00am</td>
<td><strong>Gangs Through the Ages</strong> - SBS, Criminology and Criminal Justice</td>
</tr>
<tr>
<td></td>
<td>Molly Kitz, Molly Kitz, Kyle Renning, Kelsey Varner, Ryan Hawkins, Jacob Julian</td>
</tr>
</tbody>
</table>
Skydome Roundtable R1

9:00am-9:25am - Roundtable Discussion
*Deaths in Detention Facilities Operated by ICE* - SBS, Criminology and Criminal Justice
Jocelyn Reyes

9:30am-9:55am - Roundtable Discussion
*NAU Green Office Certification: Collective Efforts for Waste Reduction* - CEFNS, Environmental Sciences and Environmental Studies; Environmental Sciences and Environmental Studies
Alexandra Garcia, Matthew Belus, Heather Aaron, Megan Starostecki

10:00am-10:25am - Roundtable Discussion
*Public Art: Plastic Bag Ban* - UC, University College
Jordan Morales, Wells Jackson

11:00am-11:30am - Roundtable Discussion
*Pursuit of the Future Perfect* - HONORS, Honors Program
Jonathan Malone, Alex Lacy, Joshua Gutman

Skydome Roundtable R2

9:30am-9:55am - Roundtable Discussion
*Creating Democratic Spaces in the College Of Education* - COE, Teaching and Learning; Educational Specialties
Anaheed Hill, Thomas Salerno

10:30am-10:55am - Roundtable Discussion
*How Diverse are You?* - COE, Teaching and Learning; Educational Specialties
Jacqueline Noriega, Tulsi Stransky, Raina Bekis

11:00am-11:30am - Roundtable Discussion
*The Future of Human and Animal Synergy* - HONORS, Honors Program
Madison Kuyper, Lexie Sutcliffe, Ashley Mutchek

Skydome Roundtable R3

9:00am-9:25am - Roundtable Discussion
*School Gardens: How to Teach in the Garden* - UC, University College
Joey Bogart

10:00am-10:25am - Roundtable Discussion
*New Economy NAU ART: Center for Social Innovation and Entrepreneurship* - UC, University College
Whitney Salewske

11:00am-11:30am - Roundtable Discussion
*CopyCat: The Future of Social Technology* - HONORS, Honors Program
Shayna King, Derek Curtis, Nia Harris
Skydome Stage A

9:00am-9:20am - Oral Presentation
**Zero Net Energy Building** - CAL, Art
Hathami Alkhaldi

9:20am-9:40am - Oral Presentation
**Patriotism, Common People, and Saboteurs: Alfred Hitchcock's American Pilgrimage in Saboteur (1942)** - CAL, Comparative Cultural Studies
Claire Schnucker

9:40am-10:00am - Oral Presentation
**Queering Islam: Queer Muslim Identity as Exhibited in Museums** - CAL, Comparative Cultural Studies
Justin Williams

10:00am-10:20am - Oral Presentation
**American Anti-Japanese Propaganda in the Era of the Second World War** - CAL, History
Christina Hack

10:20am-10:40am - Oral Presentation
**History and Cinema: Exploring theLasting Ramifications of the Partition of India** - CAL, History
Matthew Waters

10:40am-11:00am - Oral Presentation
**Stalin, Stanislavski, and the System: An Unlikely Creative Boom in a Country of Censorship and Shortages** - CAL, History
Jennifer Worden

Skydome Stage B

9:00am-10:00am - Oral Presentation
**Beyond The Burqa** - Honors, Honors Program
Shelby Compton, Desiree Hopkins, Samantha Dowhie

10:00am-11:00am - Performance
**The O.K. Corral: Shootin' Down the Myths** - Honors, Honors Program
Kayla Olsen, Kaitlyn Welk-Robbins, Trevor Petersen, Grace Gosz, Carl Zapfe, Emily Bowen, Keeley Dietze, Nora Webster, Miranda Mitsis, Celeste Tabares

Skydome Stage C

9:00am-10:00am - Exhibit
**The Canyon** - Honors, Honors Program
Kayli Chambers, Kyle Larsen, Leah Gavin

The Quirky and Queer: Anarchy and Gay Marriage

10:00am-10:40am - Oral Presentation
**A Short Film Detailing Anarchy: A Fictional Account of Slab City** - Honors, Honors Program

10:40am-11:00am - Oral Presentation
**Marriage: A Queer Institution** - Honors, Honors Program
Emma McVeigh
Skydome Stage D

9:00am-10:00am - Oral Presentation
The Quest of Euphoria? - Honors, Honors Program
Kayla Rutledge, Michael Crutcher, Emily Powell, Sean Buechel, Darrion Edwards

10:00am-11:00am - Oral Presentation
So You Think You Know Yourself: Understanding the Human Mind - Honors, Honors Program
Catherine Crane, Kyle Weiss, Kathryn Meyers, Zach Kramer, Audrey Sumpter

Skydome Stage E

9:00am-9:15am - Oral Presentation
Traveling Rwanda - COE, Teaching and Learning; Educational Specialties
Nicole Hyatt

9:15am-9:30am - Oral Presentation
You're Not Alone - COE, Teaching and Learning; Educational Specialties
Josh Strebe

9:30am-9:45am - Oral Presentation
What are the Benefits of Medicinal Marijuana? - COE, Teaching and Learning; Educational Specialties
Andy Tzinberg, Alexis Senkow

9:45am-10:00am - Oral Presentation
The Shifting Navajo Nation - COE, Teaching and Learning; Educational Specialties
Tyler Eder

duBois Agassiz Room

8:55am-9:20am - Oral Presentation
Sun Valley Water & Wastewater Project - CEFNS, Civil and Environmental Engineering
Sara Bateman, Mohammad Alsabah, Adam Cordero, Mary Strong

9:20am-9:45am - Oral Presentation
2015 ASCE Steel Bridge Design Project - CEFNS, Civil and Environmental Engineering
Lauren Stadelmeier, Noel Cruz, Sarah Higgins, Wendy Clark

9:45am-10:10am - Oral Presentation
Adsorptive Capacity of Orange Peels and Zero Valent Iron Filings - CEFNS, Civil and Environmental Engineering
Makenzi Beltran, Hussain Alkandari, Abdulaziz Alsaraf, Jiahao Zhang

10:20am-10:45am - Oral Presentation
2015 ASCE Concrete Canoe - CEFNS, Civil and Environmental Engineering
Cynthia Alvarez, Kristin Van Sciver, Jeremy DeGeyter, Ramon Aguilar, Matthew Snyder
### duBois Festival Room

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation Title</th>
<th>Presenters</th>
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<tbody>
<tr>
<td>8:55am-9:20am</td>
<td>Interactive Point Visualization</td>
<td>Tim Velgos, Erin Bailey, Curtis Bilbrey, Alex Farmer</td>
</tr>
<tr>
<td>9:20am-9:45am</td>
<td>Automatic Syllabification</td>
<td>Salvatore Bottiglieri, Michael Albanese, Drew McDaniel, Trent Cooper,</td>
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<td>Adam Thomas</td>
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<tr>
<td>9:45am-10:10am</td>
<td>SciViewer</td>
<td>Alex Lanza, Austin Sanders, Leah Kalush, Justin Liddicoat</td>
</tr>
<tr>
<td>10:20am-10:45am</td>
<td>Increasing Taxonomic Resolution of Microbial Communities</td>
<td>Karthik Handady, Ian Humphrey, Cate Holcomb, Ryan Buckingham, Crystal Hepp</td>
</tr>
<tr>
<td>10:45am-11:10am</td>
<td>Implant Battery Charger GUI Research &amp; Development</td>
<td>Robert Winkler, Nancy McCollough, Kevin Meyer, Tomas Zukowski</td>
</tr>
<tr>
<td>11:10am-11:35am</td>
<td>Net Solar Charger</td>
<td>Florent Binyom, Muqrin Alsawa, Orion Tom, Ziyang Xiao, Fatemah Alsayegh</td>
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</tbody>
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### duBois Fremont Room

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation Title</th>
<th>Presenters</th>
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</thead>
<tbody>
<tr>
<td>8:55am-9:20am</td>
<td>AquaScooter</td>
<td>Corey Jones, Meagan Morrison, Sydney Kemper, Tyler Furuya, Troy Ballard</td>
</tr>
<tr>
<td>9:20am-9:45am</td>
<td>Aquascooter 2.0</td>
<td>Elizabeth Tyler, Dylan Cannon, Darin Gilliam, Eli Palomares, Jiyan Wang, Tyler Winston</td>
</tr>
<tr>
<td>9:45am-10:10am</td>
<td>NASA Human Exploration Rover</td>
<td>Kyle Carpentier, Josh DeBenedetto, Joey Annolino, Greg Dowske, Joseph Andaya, Wilson January</td>
</tr>
<tr>
<td>10:20am-10:45am</td>
<td>Micro Wind Turbine</td>
<td>Jorge Vielma, Hussain Mohammad, Alex Hunter, Hengming Dai, Alyosha Sandigo</td>
</tr>
<tr>
<td>10:45am-11:10am</td>
<td>2nd Generation Charging Station</td>
<td>Ruben Villacanas, Jaseem Alhabshy, Riyadh Alzahrani, Brandon Gabrelcik, Ryan Murphy</td>
</tr>
<tr>
<td>11:10am-11:35am</td>
<td>Parabolic Trough - Tracking and Energy Extraction</td>
<td>Jairo Rivera-Mendez, Saad Almonneay, Robert Blaskey, Daniel Chief, Christopher Mesko, Jacob Seitzer</td>
</tr>
</tbody>
</table>
8:30am-8:42am - Oral Presentation
Camp Colton: The Legacy of Interdisciplinary Environmental Education in Flagstaff, AZ - CEFNS, Environmental Sciences and Environmental Studies
Nicole Ortega

8:42am-8:54am - Oral Presentation
Whipstone Farm - The business, the science, the passion - CEFNS, Environmental Sciences and Environmental Studies
Brett Ireland

8:54am-9:06am - Oral Presentation
Environmental Education at The Arboretum of Flagstaff - CEFNS, Environmental Sciences and Environmental Studies
Carter Doud

9:06am-9:18am - Oral Presentation
Friends of Flagstaff's Future Internship - CEFNS, Environmental Sciences and Environmental Studies
Dezirea Acker

9:18am-9:30am - Oral Presentation
Flagstaff EcoRanch Fall Internship 2014: Tangible, Local and Sustainable Solutions. - CEFNS, Environmental Sciences and Environmental Studies
John Christ

9:30am-9:42am - Oral Presentation
Is Conventional Landscaping More Efficient Than Low Impact Landscaping? - CEFNS, Environmental Sciences and Environmental Studies
Bryan Jagiello

10:06am-10:18am - Oral Presentation
Developing BioScience Education Enrichment Kits for Educators in Flagstaff, AZ - CEFNS, Environmental Sciences and Environmental Studies
Melissa Fisher

10:18am-10:30am - Oral Presentation
Spreading awareness on air quality while introducing alternatives to current EPA opacity standards - CEFNS, Environmental Sciences and Environmental Studies
Randi Ryan

10:30am-10:42am - Oral Presentation
Sustainability in Coconino County: An Inside Perspective - CEFNS, Environmental Sciences and Environmental Studies
Rachel Heydorn

10:42am-10:54am - Oral Presentation
Planting the Seed for a Sustainable Future in Flagstaff, AZ - CEFNS, Environmental Sciences and Environmental Studies
Alysse Lerager

11:00am-11:12am - Oral Presentation
Food Sustainability: Siena's Various Food Operations and Connections to Operations in Arizona, United States - CEFNS, Environmental Sciences and Environmental Studies
Claire Silvernale

11:24am-11:36am - Oral Presentation
Demand and Proposed Methods for Local Food Production on Saipan - CEFNS, Environmental Sciences and Environmental Studies
Bobbi Wilson, Tyrell Pauling, Erik Van Der Maas
9:18am–9:30am - Oral Presentation
**Patterns of Arbuscular Mycorrhizal Fungal Communities in the Serengeti National Park** - CEFNS, Environmental Sciences and Environmental Studies
Sara Krznarich, Anita Antoninka, Bo Stevens, Nancy Johnson

9:30am-9:42am - Oral Presentation
**Defecation, Realization, Restoration: The Oak Creek Watershed Council (OCWC)** - CEFNS, Environmental Sciences and Environmental Studies
Dohna Bicoy

9:54am-10:06am - Oral Presentation
**The Presence of Non-native Crayfish and their Effects on the Sonora Mud Turtle in Central Arizona** - CEFNS, Environmental Sciences and Environmental Studies
Solan Watts, Charles Drost

10:06am-10:18am - Oral Presentation
**Southwest Riparian Habitat and Tamarisk Leaf Beetle Introduction** - CEFNS, Environmental Sciences and Environmental Studies
Trevor Glynn

9:45am-10:10am - Oral Presentation
**Child Mobility Project: Learning Through Assisted Movement** - CEFNS, Electrical and Computer Engineering
Jessica Randolph, Jessica Randolph, Kohlton Gray, Brad Turcotte, Dale Mongeau, Brian Gilpin, Brendan Jacobs

10:18am-10:30am - Oral Presentation
**Internship on the Range: Where Managing Cattle and Water Meet** - CEFNS, Environmental Sciences and Environmental Studies
Traci Swift

10:30am-10:42am - Oral Presentation
**Electrofishing: Protecting the Endangered** - CEFNS, Environmental Sciences and Environmental Studies
Daniel Kimball

10:42am-10:54am - Oral Presentation
**Assessing Energy Usage at Northern Arizona University with Visual Interactive Technology** - CEFNS, Environmental Sciences and Environmental Studies
Katie Cloud

8:55am-9:20am - Oral Presentation
**NASA Radiation Absorption in Tissue Samples: Measurement of Radiation Flux** - CEFNS, Electrical and Computer Engineering
Keith Caldwell, Trevor LaBanz, Austin Rhodes, Josiah Sellstrom, Katherine DeFonce

9:45am-10:10am - Oral Presentation
**Child Mobility Project: Learning Through Assisted Movement** - CEFNS, Electrical and Computer Engineering
Jessica Randolph, Jessica Randolph, Kohlton Gray, Brad Turcotte, Dale Mongeau, Brian Gilpin, Brendan Jacobs

10:20am-10:45am - Oral Presentation
**Developing an Alternative Powered Mobility Device for Disabled Children** - CEFNS, Mechanical Engineering
Sarah Hanson, Marissa Brzozovy, Justin Mully, Nabeal Sunna

10:45am-11:10am - Oral Presentation
**Preventing Cattle Disease: A Lesoit, Tanzania Project** - CEFNS, Civil Engineering and Environmental Engineering
<table>
<thead>
<tr>
<th>Topic</th>
<th>Presenter/Date</th>
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<tbody>
<tr>
<td><strong>Skydome floor: Posters (9:00am-11:00am)</strong></td>
<td></td>
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<tr>
<td><strong>CAL - Comparative Cultural Studies</strong></td>
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<tr>
<td>Political Propaganda in Islamic Pilgrimage Architecture</td>
<td>Jasmine Barber-Winter</td>
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<td>- Display board [126A]</td>
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<tr>
<td>Pilgrimage and Sacred Space in Film: Dogma</td>
<td>Maia Cassidy</td>
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<tr>
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<td>- Display board [126B]</td>
</tr>
<tr>
<td>Modern Influence on Pilgrimage and Sacred Spaces</td>
<td>Jonathan Hart</td>
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<td>- Display board [126C]</td>
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<tr>
<td><strong>CAL - Interior Design</strong></td>
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<tr>
<td>From Silo to Prepper's Retreat</td>
<td>Amanda Hathaway</td>
</tr>
<tr>
<td></td>
<td>- Display board [119A]</td>
</tr>
<tr>
<td>Women's Sanctuary: Designing the Ultimate Women's Shelter Facility</td>
<td>Hannan AL-Kharashi</td>
</tr>
<tr>
<td></td>
<td>- Display board [119C]</td>
</tr>
<tr>
<td>The Student Avenues</td>
<td>Zein Atout</td>
</tr>
<tr>
<td></td>
<td>- Display board [120A]</td>
</tr>
<tr>
<td>Gender and the Public Restroom</td>
<td>Briana Bohannon</td>
</tr>
<tr>
<td></td>
<td>- Display board [120C]</td>
</tr>
<tr>
<td>Rabat Moroccan Restaurant - Converting a Dance Hall into a Restaurant</td>
<td>Sarah Clemens</td>
</tr>
<tr>
<td></td>
<td>- Display board [121A]</td>
</tr>
<tr>
<td>Aging in Place - Home Safety for Seniors</td>
<td>Ting Ting Deng</td>
</tr>
<tr>
<td></td>
<td>- Display board [121C]</td>
</tr>
<tr>
<td>Urban Renewal: Designing Family Friendly Homes for a Low Income</td>
<td>Danelle Hernandez</td>
</tr>
<tr>
<td>Community</td>
<td>- Display board [122A]</td>
</tr>
<tr>
<td><strong>CAL - Global Languages and Cultures</strong></td>
<td></td>
</tr>
<tr>
<td>Hispanic Authors in the United States</td>
<td>Emily Smith</td>
</tr>
<tr>
<td></td>
<td>- Display board [129D]</td>
</tr>
<tr>
<td>Type 2 Diabetes Mellitus Described in the Navajo Language</td>
<td>Kyrstie Lauing</td>
</tr>
<tr>
<td></td>
<td>- Display board [130A]</td>
</tr>
</tbody>
</table>
**POSTER LISTINGS: MORNING SESSION**

Search for presenters, titles, and abstracts at the event kiosks or online at nau.edu/symposium

---

**Naamu Xunuta School of Music**

**Andrea Luque - Display board [130C]**

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**CAL - Music**

---

**CEFNS - Biological Sciences**

---

**Do Climate and Elevation Affect Fly Pollinator Morphology and Behavior?**

Ryan Trzcinski - Display board [9C]

---

**Using Genetic Fingerprinting to Understand the Source and Dynamics of Human Plague Infections in Madagascar**

Cedar Mitchell, Voahangy Andrianaivoarimanana, Dawn Birdsell, Minarisoa Rajerison, Paul Keim, Dave Wagner - Display board [17A]

---

**Characterization of the antibody-mediated immune response in patients infected with Burkholderia pseudomallei**

Lauren Pristo, Karen Hernandez, Christopher Allender, Heidi Hornstra O’Neill, Bart J. Currie, Joseph D. Busch, Erik Settles, Jinhee Yi, Paul Keim - Display board [17B]

---

**Genetic Variability and Population Structure of Wedge-Tailed Shearwater;**

Liliana Ortiz, Russell Benford, Nashelly Meneses, Joseph Busch - Display board [18A]

---

**The Importance of Biogeography in Determining Species Response to Climate Change**

Caitlin Chapman - Display board [18B]

---

**Kinematics and Back Packs**

Alyssa Ortiz, Cassidy Crews - Display board [18C]

---

**Flesh Fly Pupal Weight Predicts Viability**

Jeffrey Baranowski, Shay Allred - Display board [18D]

---

**Effect of Estrogen on Resistance to Oxidative Stress**

Amy Ziems, Aaron J. Done, Michael Newell, Tinna Traustadottir - Display board [12A]

---

**Identifying Brucella Species Causing Human Disease in Turkey**

Brittany Bayer, Dawn Birdsell, Jeff Foster, Faith Walker, Paul Keim, David Wagner, Yasemin Ozsurekci, Selcuk Kilic - Display board [12B]

---

**Understanding the Persistence of Plague in a Highly Active Focus in New Mexico**

Rachel Meyer, Carina Hall, Heather Centner, Jason Sahl, Rebecca Coleman, Amy Vogler, Jeannine Petersen, Paul Keim, David Wagner - Display board [12C]

---

**Comparison of Ohi’a Tree Genotypes on Old Versus New Lava Soils in Hawai’i**


---

**Intensity of Postcopulatory Sexual Selection in the Ectoparasitic Pea Crab, Dissodactylus primitivus (Brachyura: Pinnotheridae)**

Robert Prather, Stephen Shuster - Display board [13A]
COI Sequencing of an Undescribed Leech Species Found at Montezuma Well, Arizona
Jamal Wells, Adam J Vazquez, Rebecca Beresic-Perrins, Kelsey Banister, Isabel Moya Gonzalez, Theresa Rizza, Stephen M. Shuster - Display board [13B]

Measuring Humoral Immunity Over the Course of an Infection Using Surface Plasmon Resonance
Austin Shannon, Mitch Keener, Mukoma Simpanya, Joseph Busch, Fernando Monroy, Richard Bowen, David AuCoin, Pandit S.G., Paul S. Keim - Display board [13C]

Techniques for Identifying Individual Skunks Based on Pelage Patterns
Dylan Ray, Tad Theimer - Display board [13D]

Reconstruction of a Caiman Skeleton
Tim Fox, Sarah Nowak - Display board [14A]

Coxiella: Potential Transmission Across the Livestock-Wildlife Interface

Exposure to Environmentally Relevant Arsenic Levels Affects Estrogen Sensitive Tissues in an Adult Vertebrate.
Jonathan Grunwald, Stephan Ramos - Display board [14C]

Microbial Floras between Species of Leeches in Montezuma Well
Chris Lancaster, Joshua Carmen - Display board [14D]

Electrospinning Proteins as a Method to Create Customizable Scaffolds for Tissue Engineering Applications
Jordan Muller, Robert Kellar, Robert Diller - Display board [15A]

Does the Morphology of the Vertebral Elements Influence Escape Response Timing and Displacement in Bony Fishes?
Alexander Finden, Michael Minicozzi, Alice Gibb - Display board [15B]

Ultrastructural Morphology of Borrelia burgdorferi Viruses
Felipe Daniel Cardoso, Kylie Sage, Nathan Nieto - Display board [15C]

Prevalence of Rickettsia spp. the Causative Agent of Rocky Mountain Spotted Fever in Arizona
Alma Solis, Joshua Calvano, Adam Pilkington, Kathleen Slocum, Nathan C. Nieto - Display board [15D]

When is a C-start Not a C-start? Escape Behavior in the English Sole (Parophrys vetulus)
Yordano Jimenez, Alice Gibb, Ian MacDonald - Display board [16A]

A Comparison of Student Performance and Experiences in a Traditional Versus 'Flipped' Classroom (BIO 240)
Jocelyn Garcia, Alison Adam - Display board [16B]

A Decade of Increased Temperature Affects Soil Fungal Communities
Matthew Belus - Display board [16C]

Mechanical Characterization of Freshly Excised and Decellularized Murine Integument
Ryan Geier - Display board [16D]

A Comparison of Plethysmography and Helium Dilution in the Measurement of Functional Residual Capacity in Humans
Amanda R. Barnes, Michelle J. Lee, J. Richard Coast - Display board [17C]

Seasonality Effects on Pollinator Communities Along an Elevation Gradient
Paulo R. Silva, Lindsie M. McCabe, Neil S. Cobb - Display board [17D]
Investigation of Plant-Derived Carbon Aerogels for Use in Multifunctional EDLCs
Brett Cutler, Benjamin Luginbuhl - Display board [27A]

Uranium and Arsenic Contamination in Grasses from Leupp, Arizona
Mackenzie Simmonds - Display board [25A]

A sea urchin’s insight into science: Synthesis of naphthoquinone natural products
Thomas Haden, Samantha Kruse, Loren Reichfeld - Display board [26A]

Statistical Analysis of Uranium Exposure of Sheep Near Abandoned Mines
Joshua Froyum - Display board [26C]

Oxime Preparation for the Production of Isoxazoline Derived Bacterial Growth Inhibitors
Bradley Marsh, Joshua Ellsworth - Display board [27C]

CEFNS - Chemistry and Biochemistry

CEFNS - Civil Engineering, Construction Management, and Environmental Engineering

Kendrick Street Bicycle Boulevard Design
Christopher Sobie, Pierce-Jon McKelvey, Stephen Hirte, Yousef Alkandari - Display board [10A]

Vulture Mine Tailings
Audrey Lang, Nicolas Boon, Nicole Stanczak - Display board [11A]

Preventing Wrong-way Car Accidents in Arizona
Andrea Goodwin - Display board [11B]

Separation of Oil from Water - H2Oleum

Channel Stabilization Design for Summit Homeowner
Eric Carrasco, Fatemah Husain, Hamad Alajmi - Display board [11D]

CEFNS - Electrical and Computer Engineering

Repeat-Accumulate Codes with Modified Iterative Decoding Algorithms
Leonard Peshlakai - Display board [10B]

Wildlife Telemetry Drone

Space Radiation Detection Imaging System
Jacob King, Ricardo Peterson, David Keene, Serena Sauceda, Brandon Shipman - Display board [9B]
**Mother Road Brewing Company Sales Dashboard**  
Veronika Alves, Andrew Alonis, Shariq Jamil, Jason Travis - Display board [9D]

**Clinical Pathways Management and Simulation**  
Christopher Heiser, Eduardo Iniguez, Jordan Harris - Display board [10C]

---

**CEFNS - Environmental Sciences and Environmental Studies**

**FeederWatch Citizen Science Project at Northern Arizona University's Southwest Forest Science Complex**  
Kendle Webster, Sidney Michl, Philip Minette - Display board [6B]

**Environmental Education: Reaching Youth in Elementary Schools**  
Taylor Landy, Alex Gilmore, Rebecca Baracco - Display board [7B]

**Project FeederWatch**  
Ian Smith, Jake Cowin, Corey Mueller - Display board [7C]

**Remote sensing analysis of an invasive plant in the Glen Canyon**  
Rene Horne, Temuulen Sankey - Display board [7D]

**Sticking to the 200-mile radius; Local Eating in Flagstaff, AZ**  
Samantha Davidson, Lily Styrmoe, Andrew Johnson, Crystal Rolinger - Display board [8A]

**Locomotor behaviors exhibited by California grunion (Leuresthes tenuis) during spawning runs on California beaches vary with environmental conditions**  
Andrew Johnson, Clinton Moran, Alice Gibb, Kathy Dickson - Display board [8B]

**Feeding the Birds: A Feeder Watch Project**  
Melanie Glessing, Elizabeth Olson, Emmett Tsosie - Display board [8C]

**Reconstructing Past Environments to Understand Human Land Use: Paleoecology of Montezuma Well, Arizona**  
Emmett O. Tsosie, R.S. Anderson - Display board [8D]

**Snow Cover Estimates Using Landsat Satellite Images**  
Mariah Ashley, Jason McVay, Jonathon Donald, Temuulen Sankey - Display board [6A]

**Molecular Identification of a Lepidopteran Herbivore on a Critically Endangered Tree**  
Melissa-Ann Ares, Russell Benford, Nashelly Meneses - Display board [6C]

**Dark Sky Meter: Measuring Night Sky Light Pollution in Flagstaff, Arizona**  
Sita Stanfield, Catherine Alex Smolenski, Jennifer Blanks - Display board [7A]

---

**Planif-i: Itinerary Creation Web Application**  
Lane Fujikado, Mark Thompson, Sarah Kehoe, Mohammad Al-Otaibi - Display board [10D]
**CEFNS - Forestry**

**Effects of Ponderosa Pine Biochar in Arizona’s agricultural soil: water retention, drought resistance, and crop yields**
Daniel DePinte - Display board [19A]

**Comparing Metabolic Rates of Native Chubs Species and Non-Native Fish Species of Arizona**
Harlan Tso, Matthew O’Neill - Display board [19C]

**CEFNS - Geology**

**Paleo-environment Reconstruction and Origins of the Chalk Canyon Formation Ash, Central Arizona**
Rebecca Beers - Display board [23A]

**A Geologic Inquiry of Upper Lake Mary’s Rising Turbidity Levels, and the Effects on the Reservoir’s Water Quality**
Rae Byars - Display board [23C]

**CEFNS - Green Fund**

**The Global Peace and Tolerance Garden at the New International Pavilion**
Dylan Rust, Leah Manak - Display board [1A]

**CEFNS - Mathematics and Statistics**

**Cycles in various nonlinear, age-structured population models**
Melissa Theobald - Display board [22A]

**CEFNS - Mechanical Engineering**

**Flexible Maintenance Calendar**
Kyle Granchelli, Duke Ayers, Ryan Dooley, Kristopher Bullins, Jarrin Oishi - Display board [1C]

**Horizontal Test Stand Rotation Mechanism**
Nicholas Garcia, Mary Begay, Brett Booen, Calvin Boothe, James Ellis - Display board [2C]

**Do Mature Biocrusts Support More Diverse Microarthropod Communities?**
Laura Brown, Anita Antoninka, Matt Bowker - Display board [20D]
Injection Molded Silicone Mock Vessels for In-Vitro Testing of VIABAHN Endoprostheses
Samantha Nickerson, Ryan Geier, Jingyun Chen, Kirstin Martin, Justin Paothatay, Ryan Smith - Display board [3D]

SAE Mini Baja
Ricardo Inzunza, Ahmad Alnattar, Zane Cross, Kyle Egan, Nick Garry, Neil Gehr, Trevor Hochhaus, Brandon Janca, Matthew Legg, Ryan Worden - Display board [6D]

Mobile Computer Cart
Trevor Scott, Mohammed Aldosari, Abdulrahman Alhamdi, Joel Asirsan, Samuel Martin - Display board [4D]

Mechanical Paper Shredder
Kendall Meyer, Sultan Alshahrani, Ryan Baloo, Mohammad Molani - Display board [5B]

SAE Aero Design (Micro)
Ryan Randazzo, Jeffrey Chambers, Brian Jew, Kody Kirchner, Max Schwartz, Erin Valentine - Display board [4B]

CEFNS - Physics and Astronomy

Heating Models of Tiger Stripes on Enceladus
Daniel Raggio, Oleg Abramov - Display board [21A]

Star Formation in Interacting Galaxies
Ian Beagles - Display board [21C]

LGBTQ Coming Out
Alyssa Gersbach - Display board [50B]

COE - Teaching and Learning; Educational Specialties; Educational Foundations

LGBTQ Coming Out
Alyssa Gersbach - Display board [50B]

Maintaining the Momentum: TASH@NAU
KarenAnn Mancha, Kristen Harris, Chantelle Chandler, Madeleine Krull, Rachel Casey - Display board [50D]

Indigenous Cultural Understandings at NAU
Wyatt Oden, Tristan Parkinson, Wyatt Oden - Display board [53D]

How Loneliness Impacts the Lives of Individuals with an Intellectual Disability
Amber Farley - Display board [51B]

Implementation of Universal Design in the Classroom
Yasmin Khatoun - Display board [51D]

The Growth from K-12
Alexis Palmer - Display board [54B]

What’s Engagement Got to Do with it?: Going Beyond Classroom Management
Abigail Mapes, Abigail Mapes, Vanessa Karina Flores, Chelsea Schoech - Display board [54D]

Fighting for Inclusion
Kirsten Weis, Nathan Curnow - Display board [55B]

Students in the Special Olympics
Breana Morris - Display board [53B]

Indigenous Culture and Knowledge in the College of Arts and Letters
Tyler Bean - Display board [52B]

Native American Students and Public School System Curriculum
Morgan Guild - Display board [52D]
The Correlation of Pausing and Child Vocalizations Between Parents and Children
AnaClara Rice - Display board [41A]

HHS - Communication Sciences and Disorders

Global Interdisciplinary Project: Mainpat, India
Danica Cusack, Haylee McElroy, Jennifer Girvin, Caitlynn Tompsett - Display board [41B]

Clinical and Self-Perceived Oral Health of Older Adult Patients
Verity Denham, Lundon Hatcher, Jennifer Girvin, Hope Spreadbury, Amber Jacobs - Display board [41C]

The Public's Perception of the Dental Team’s Preparations and Responsibilities
Annaliese Gastreich, Jadwa Alsulami, November Alvarado, Revan Dawood - Display board [41D]

Continuing Education Course for Nurse Practitioners on the Application of Fluoride in Their Practice to Prevent Early Childhood Caries.
Candice Marissa Matthews-Penrod, Kourtney Guzman, Danica Cusack, Mira Angle - Display board [42A]

Interprofessional Medical Care
Haylee McElroy, Haylee McElroy, Jason Leininger, Amber Clark, Angie Salazar - Display board [42B]

HHS - Dental Hygiene

Glass Ionomer Sealants: Does Conditioner Use Improve Retention Rates?
Andrea Nemeth, Michelle Arbagey - Display board [42C]

Dental Referral Compliance and Dental Caries Knowledge Amongst Caregivers of Children Involved in a School-Based Oral Health Program
Menith Nunez, Joey Mackenzie, Menith Nunez - Display board [42D]

Do NAU Students Know How To Prevent Tooth Decay?
Stevie Stewart, Caitlynn Tompsett, Wendy Millar - Display board [43A]

The Relationship Between the Oral Health Literacy of Parents/Caregivers and the Incidence/Severity of Childhood Decay in School-Aged Children
Kortney Westerlund, Julia Conway, Anita Abers, Kathleen Heidt - Display board [43B]

HHS - Health Sciences

Articulation Progress in Children with Combined Repaired Maxillofacial Abnormalities.
Emma Drehobl - Display board [43C]

American Indians, Renal Failure and The Plant Based Diet: Plants Are Friends... and Food
Jacqueline Brown - Display board [43D]

Malignant Hyperthermia: A Case Study of a High School Football Player
Chelsey Baca - Display board [44A]

Injury History Versus Current Fitness Baseline in Female Club Gymnasts
Hailey Kaus - Display board [44B]
The Best Care for Cystic Fibrosis in Athletics
Derick Lehman - Display board [44C]

The Effects of Scoliosis on Young Athletes
Megan Marbach - Display board [44D]

Costochondritis: A Case Study
Elisabeth Morcom - Display board [45A]

Platelet Rich Plasma and its Healing Effects on Tendinopathies
Stephanie Vermillion - Display board [45B]

Educating Post-Exercise Nutrition
Taylor Tegtmeyer, Anthony Santos, Hannah Simpson, Bianca Rojas - Display board [45C]

Social Seniors
Michael Bailey, Sara Hair, Shelli Kahler, Tosha Sanchez - Display board [45D]

Mindful Eating
Amber Baker, Desiree Cody - Display board [46A]

Summit High School Nutrition Program
Jaze Butler, Dana Hughes, Antoinette Wilson - Display board [46B]

Smoke Alarm Safety
Tyler Carter, John Tomazin - Display board [46C]

Flagstaff Fun Fitness at the Boys & Girls Club
Stephanie Gillooly, Giovanna Picarella, Ashley Baker - Display board [46D]

Healthy Mom, Healthy Baby
Lauren Justus, Darriel Banks, Sydney Berner, Shalyn Maltos, Karina Herrera - Display board [47A]

Anytime Fitness
Laura Lim, Anthony Troftgruben, Casey Jahn, Ekaterina Melkozernova - Display board [47B]

Nutrition Intervention with Fit Kids in Title I Flagstaff Public School
Mara Tretheway, Jill Sawyer, Riley O’Brien - Display board [47C]

Shake it Up at Summit
Ariana Tyler, Griselda Santos, Jessica Javer - Display board [47D]

HHS - Nursing

Diabetes Prevention, Education and Management Through Traditional American Indian Wellness
Sean Paul Begau - Display board [48A]

Reducing Sleep Disturbances in the Hospital Setting to Promote Healing
Alejandro Gonzalez, Johnelle Hoskie, Stephenie Nechvatal, Taylor Brown - Display board [48B]

HHS - Physical Therapy and Athletic Training

The Difference in Lower Extremity Injury Rates When Played on Natural Grass Compared to Third Generation Artificial Turf
Kayla Pearce - Display board [48C]

S-100B Used as a Tool for Concussion Diagnosis: A Review of Literature
Ben Kmetz - Display board [49A]

Objectively Assessing the Efficacy of Kinesio Tape to Reduce Swelling in Anterior Talofibular Sprains
Caroline Herrera - Display board [48D]

Psychological Aspect Of Athletic Training: A Literature Review
Cecilie Pirronello - Display board [49B]

Treatment of pain in Osteoarthritic patients: A Review of Literature
Tessa Powell - Display board [49C]
**Honors - Honors Program**

**Breaking Bad Meth in the Human Body**  
Sierra Sullivan, Tarah Stroub - Display board [105A]

**The Morality of Breaking Bad**  
Nathan Ashlock - Display board [105B]

**Breaking Racism: Analysis of Portrayal of Minorities in Breaking Bad**  
Joseangel Gonzalez - Display board [105C]

**Christianity in the Amoral Breaking Bad**  
Alaine Hernandez - Display board [105D]

**Breaking Breaking Bad**  
Michael Moghadasnia, George Aubrey, Lauren L’Ecuyer, Alexandra Spotts - Display board [106A]

**Breaking Bad and the Wolf of Wall Street**  
Jack Poupore - Display board [106B]

**Misogynistic Language of Breaking Bad**  
Michael Ramirez - Display board [106C]

**The Role of Misogyny in Breaking Bad**  
Hannah Lillie - Display board [106D]

**Disney is Everywhere**  
Savannah Dotterman - Display board [107A]

**Disney in Government**  
Christina Andrews - Display board [107B]

**Societal Influence on Disney Animated Films**  
Patricia Biasong - Display board [107C]

**The Truth Behind the Fairy Tale**  
Kayla Casey - Display board [107D]

**Psychology of Color in Disney Films**  
Jennifer Genung - Display board [108A]

**Disney’s Game of Monopoly**  
Arthur Gibson - Display board [108B]

**Disney Corporation in a Post 9/11 World**  
Orianna Hernandez - Display board [108C]

**Love and Gender by Disney**  
Sloane Koogle - Display board [108D]

**The Disney Effect**  
Teoni Kosters - Display board [109A]

**The Sound of Disney**  
Leslie Lerma - Display board [109B]

**Heroes, villains, and Disney**  
Jenn McDonnal - Display board [109C]

**Environmentalism in Disney Film**  
Jaclyn Nishihira - Display board [109D]

**Race in Disney’s Pocahontas**  
Monique Rouhani - Display board [110A]

**Arabic Disney**  
Max Toubman - Display board [110B]

**California Adventure: Disney’s Next Mousetrap**  
Michael Smith - Display board [110C]

**The Portrayal of Psychotropic Drugs in Walt Disney Animated Classics Canon**  
Kimberly McComb - Display board [Honors EASEL]
The History and Impacts of Tourism
Kaitlin Donnelly - Display board [62A]

Archeology of Sexuality
MacKenzie King - Display board [72D]

Inhospitality: Do the Homeless Need Rescuing from Missions?
Nicholas Fisher, Caity Bishop, Brittini Howard, Ann Richardson - Display board [62B]

Maendeleo: Modern developments in Africa
Faith Chege - Display board [62C]

Languages’ Role on Gender
Ehren Keltz - Display board [62D]

The Correlation of Religion and Witchcraft in Africa
Maeghan Goldman - Display board [63A]

Witchcraft in Africa
Kaitlyn Quinn - Display board [63B]

Genders Differentiation
Rachel Segal - Display board [63C]

Tourism
Javonte Simmons, Matthew Montero, Patrick Curtin - Display board [63D]

Gender Roles: A Learned and Socially Constructed Concept
Alisha Stalley - Display board [64A]

The Archaeology of Sexuality
Michelle Aguayo - Display board [64B]

Why Farm?
Savannah Brown - Display board [64C]

Archaic Music
Derian Celaya - Display board [64D]

The Prehistory of Spirituality/Religion
Brett Daley - Display board [65A]

The Prehistory of Death and the Afterlife
Sara Fleming - Display board [65B]

The Archaeological Evolution of Music
Cailey Girard - Display board [65C]

Archaeology of Weapons and Warfare
Siara Goodyke - Display board [65D]

The Prehistory of Food and Nutrition
Alison Gregg - Display board [66A]

Archaeology of Weapons and Warfare
Brian Guy - Display board [66B]

The Archaeology of Music
Courtney Hitzeman - Display board [66C]

Written Systems Through the Years
Jessica Javier - Display board [66D]

The Prehistory of the Bow and Arrow
Paeton Keller - Display board [67A]

Archaeology of Music
Fiona Lau - Display board [67B]

The prehistory of food/nutrition
Courtney Mazzacane - Display board [67C]

The Prehistory of Food and Nutrition
MacKenzie Mitchell - Display board [67D]

The Prehistory of Religion and Spirituality
Jack Quenelle - Display board [68A]

The Archaeology of Weapons and Warfare
Maria Shimkus - Display board [68B]

The Prehistory of Death and the Afterlife
Paiton Strauss - Display board [68C]

The Archaeology of Weapons and Warfare
Daniel Terrazas - Display board [68D]

The Prehistory of Spirituality and Religion
Josie Weiland - Display board [69A]

Prehistory of Food and Nutrition
Josie Wicks - Display board [69B]
Prehistory of Weapons and Warfare
Harrison Yoshioka - Display board [69C]

Kazakhstan: Lack of Ethnographic Data
Denny Allen - Display board [69D]

What Will Remain? An Ethnoarchaeological Investigation into the Swazi, a Tribal-Kingdom from Swaziland
Alexander Ballesteros - Display board [70A]

The Mediterranean Hal-Farrug: A Maltese Agricultural Society and the Archaeological Record
Vincent Gentile - Display board [70B]

The Paliyans of Kerala and Tamil Nadu, India: Ethnoarchaeological Investigations into Paliyan Social Patterns and Correlates
Melissa Berchman - Display board [70C]

The Ulithi of the Western Pacific: Material Culture and the Archaeological Record
Courtney Davis - Display board [70D]

The Owens Valley Paiute of the Great Basin Paiute: Material Culture and the Archaeological Record
Hannah Jay - Display board [71A]

The Yuqui of Bolivia: Archaeological Correlates of a Hunter-Gatherer Society
Megan Kumorek - Display board [71B]

The Huaorani of Ecuador: An Amazonian Society and the Archaeological Record
Chelsea Richeson - Display board [71C]

The Mosuo of Southwest China: Material Culture and the Archaeological Record
Kelly Sloan - Display board [71D]

The Archaeology of Music
Zachary Snodgrass - Display board [72A]

Model for Vlax Romani Language Revitalization and Preservation
Kyle Allen - Display board [72B]

The Role of NAGPRA in Applied Archaeology
Jessica Elrod, Kellie Jones - Display board [72C]

Mathematics in Archaeology: An Integrative Approach to Mathematical Modeling in Archaeology
Michael Mowery - Display board [72D]

Where No MAN Has Gone Before: Women in the Star Trek Fandom
Jessica Andrew, Sydnee Wickstrom - Display board [73A]

Westernized Education in Nepal and its Influence on Societal Gender Roles
Margot Beauchamp - Display board [73B]

Military Identity in Kurdistan
John Farron - Display board [73C]

What is the Impact of Globalization on the Environment?
Jályn Gagnon - Display board [73D]

An Ethnographic Approach to the Pleistocene in the Ukraine
Joshua Nowakowski - Display board [SBS EASEL]
The Green Science Center
Francisco Palop - Display board [74A]

Ethnomedicine
Garrett Murphy - Display board [74C]

Clinical Services For Native American Youth on the Reservation
Tyanna Billy - Display board [75A]

Problems on the Navajo Nation
Duane Higdon - Display board [75C]

End-Stage Renal Disease On The Navajo Community
Pearl Nez - Display board [76A]

Meanings Are In People, Not Words: An Intrapersonal Approach to Communication Competency
Cynthia Becker - Display board [78A]

Social Exclusion & Isolation: The Need for Belonging and Acceptance
Joshua Cruz - Display board [78B]

Being Superwoman: Negotiating Identities and the Good Life in the Post Modern Era
Jenny Flores - Display board [78C]

Alpha Males in Postmodernity
Nathan Morales - Display board [78D]

Unlock the Love
Jamie Sowden - Display board [79A]

Mainstream Media in Relation to Communication Theory
Hannah Wheeler - Display board [79C]

It's On Us!
Lucerito Arvizu, Chance Frey, Paige Lorentzen - Display board [79D]

The Historical Cause of Overweight and Obesity Among American Indians and Alaska Natives
Kaydee Williams - Display board [76C]

Post Traumatic Stress Disorder on the Navajo Nation
Jonathan Yellowhair, Jonathan Yellowhair - Display board [77A]

The Second Corporate Takeover
Luis Viniegra - Display board [77C]

'Lactivism' in the Media: Persuasive Messages Created by Public Breast Feeding Supporters
Danielle Lackey, Dakota King, Chelsea Seifert - Display board [80A]

All Lives Matter
Marissa Mitchell, Edward Forbis, Dejzon Walker - Display board [80B]

How Persuasive Techniques Affect Professional Sports Lockouts
Rebecca Mueller, Shannon Boruch, Robert Moreno - Display board [80C]

Influence, Advocacy and the Dilemma of Journalism
Vincent Peña, Matt McElroy, James Garner - Display board [80D]

Analysis of Persuasive Techniques Utilized in Anti-Tobacco Campaigns
Lindsey Potts, Tyler Leamer, Cassandra Chavez - Display board [81A]
**SBS- Criminology and Criminal Justice**

**Comparison of American Asian, Hispanic Street Gang Subcultures, and Police Subcultures**  
Tiffany Tran - Display board [85A]

**Introducing Flagstaff Justice Court Staff to Alternative Dispute Resolution (ADR)**  
Alyssa Dutchover, Sydney Olson - Display board [85C]

**Institutional Alternative Dispute Resolution between Students and Northern Arizona University**  
Ryan Hougland, Brett Schwartz, Matt Branscome, Josiah Huggins - Display board [86A]

**The Resolution Guidebook to Freshmen Living**  
Daniel Langdon, Connor Matthews, Diego Mondragon - Display board [86C]

**What’s Your Conflict Style? - Techniques To Resolve Conflict**  
Benjamin Morse, Darcy Van Mouwerik, John Hober, Lizeth Lopez Garcia, Anthony Lamia - Display board [87A]

**Conflict Management Styles**  
Andrew Shadwick, Trevor Hook, Ryan Nowicki, Tiffany Curry, Philip Schab, Daesy Lozano - Display board [87C]

**Alternative Dispute Resolution Peacemakers**  
Brian Western, Denisse Nunez, Alyssa Soto, Brittney Harmon, Brett Robbins - Display board [88A]

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**SBS- Ethnic Studies**

**The Genius Behind Hip Hop**  
Jessica Mathiasz, Gabriella Nunnally, Corbin Jountti, Kaiah Eaton, Tylor Brown, Tiffany Onyenagubo, Manuel Apodaca - Display board [SBS EASEL]

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**SBS- Geography, Planning, and Recreation**

**Community Impacts from University Student Growth and Housing**  
Ali Alsarraf - Display board [89A]

**The Arizona Wine Industry of the 21st Century: The Dynamics of Class and Global Trends in Wine Culture**  
Cliff Ormiston - Display board [89C]

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**SBS- Institute for Human Development**

**Reshaping Media’s portrayal of Disability**  
Lindsey Compton, Shea Shoemaker - Display board [88C]
Attitudes, Smells, and Choice Blindness
Angela LaBrusciano - Display board [96A]

The Dualistic Model of Passion: Professor Outcomes and Student Evaluations
Louis Irving, Gavin Parsons, Melissa Birkett, Ann Huffman - Display board [92D]

Dual-Military vs. Dual Career Marriages with Children Still at Home: Work and Family Related Outcomes
Janalie Young, Louis Irving - Display board [93A]

Sarah Kuhn, Niya Davis - Display board [102B]

Difficulty Estimates by Magicians Versus Non-magicians
Christopher Cuellar - Display board [93B]

Effect of Music Preference while Studying on G.P.A. and Need for Cognition
Bradley Dishong, Catherine Mallory, Forrest Colavecchia, Alexandra Tyra, Johnna Mortarana - Display board [93C]

The Theater of the Mind
Marc Brewer - Display board [93D]

Perspective Taking and Empathy
Jasmine De La Torre - Display board [94A]

Research Proposal: Effects of Contextual Framing of a Magic Trick on Magical Thinking in Children
Zachary Harper - Display board [94B]

Deceptive Biological Movement in Contact Sports
Mackenzie Olson - Display board [94C]

Superstition: An Evolutionary Adaptation
Erica Palacios - Display board [94D]

Research Proposal: Cultural Factors and Beliefs of the Modern Navajo
Florisa Peshlakai - Display board [95A]

Research Proposal: Effect of Magic in Hand Therapy on Home Exercise Program Motivation
Cori Pooley - Display board [95B]

Humor as a Cognitive Distraction
Brianna Robertson - Display board [95C]

Effects of Rapport-Building on Perceived Strength of Magic Illusions
Grant Satterthwaite - Display board [95D]

Parenting Styles and Deviant Behavior
Stephanie Bosic, Kristen McFadzen, Dianna Johnson, Vannesa Banister - Display board [96B]

Social Media Effects on Happiness
DemiLynn Carvalho, Chyna-Mae Sablan, Austin De Los Santos, Ellaina Logacho - Display board [96C]

Effects of Religiosity on Preferences for Mate Selection
Andrew Haynes, Antonietta Bartley, Delaney Page, Wolfgang Nelson - Display board [96D]

An Event Related Potential Investigation of Self/Other Discrimination
Dylan Barbera, C. Chad Woodruff, Taran DePaola - Display board [97A]

Victimization Levels in College Students
Taryn Lovett, Brittanay Kirby, Shawnntell Atkins, Jessica Gowens - Display board [97B]

The Relationship Between Internet Usage and Loneliness
Cassie Schrader, Stella Elam, Zoe Anaya, Andrea Morales - Display board [97C]

Coloring Personality
Krista Henderson, Anna Birch, Tyler Rogers, Maraina Frabbiele - Display board [97D]

The Effects of Religion on Altruism
Mildred Aguilar, Ann Chen, Mackenzie Huffman, Kristen Parks - Display board [98A]
**Interpersonal Attraction and Gender Identity**  
Martha Garner, Teresa Martza, Cassandra Bizon - Display board [98B]

**Can sexual assault increase the likelihood of planning or attempting suicide? A meta-analysis**  
Joan Paul, Becca Braunstein, Kara Self, Gregory Busath - Display board [98C]

**The Point of it All: Happiness or Financial Gain**  
IsaBella Vento, Bre Hawkins, Erika Peña, Ashley Segarra - Display board [98D]

**Ideal Characteristics Versus Real Life Partners**  
Kristina White, Mariah Hartin, Caitlin Lobb - Display board [99A]

**Emotion Inducing Event Recollection and its Effect on Human Compassion**  
Rebecca Grafstrom, Ann Futterman Collier - Display board [99B]

**Sleep Characteristics of Overweight Female Undergraduates in a Weight Loss Program**  
Anna Robertson, Emily Wilson, Suzanne Daiss - Display board [99C]

**Anxiety Attachment, Emotional Dependency, and Effects on Romantic Relationship Compliance**  
Matthew Valente, Matthew Valente, Christopher Cuellar - Display board [99D]

**The Effects of Caffeine and Stress on Academic Performance**  
Blake Howell, Nicholas Butler, Zia Helgeson-Budrys, Brett Anderson - Display board [100A]

**Birds of a Feather: Skin Tone, Attraction, and Stereotyping**  
Courtney McCarthy, Anwyn Tompkins, Alicia Martin, Sarah Guinea - Display board [100B]

**The Effects of Music Tempo on the Memory Recall of Introverts and Extroverts**  
Natalie Phillips, Tanya Tobiason, Scotti Dick, Richmond Barkemeyer, Matthew Brandel - Display board [100C]

**Social Bonds in Aging**  
Colleen Teague, Andrew Shadwick, Taylor Pondy, Donna Zastrow - Display board [100D]

**Theater Well-Being**  
Hiba DuVal, Ann Futterman Collier - Display board [101A]

**Parenting Styles and Personality**  
Mikayla VanArsdel, Chelsea Heintz, Alexis Richardson, Leanne Milner - Display board [101B]

**Favorability of Adoption: How knowing someone adopted affects people’s favorability of adoption**  
Ashton Dalsing, Jasmine Castellanos, Raquel Daniels, Erikson Bighorse - Display board [101C]

**The Effect of Music Mood Type on Problem Solving Ability**  
Bailey McIntosh, Lauren Herd, Cori Schreiber - Display board [101D]

**Effects of Course Facebook Page on Instructor Perception**  
Mackenzie Onofry, Andrea Heppner, Gregory Robertson - Display board [102A]

**A systematic review of available evidence on the efficacy of Cognitive-Behavioral Based Therapy (CBT) for Perinatal, Prenatal, and Antenatal Females**  
Stephanie Crane, Samantha Roberts - Display board [102B]

**How Does That Make You Feel? A Systematic Review of the Efficacy of CBT in Treating Depressed Adolescents**  
Joshua Demakovsky, Shelby Burton - Display board [102D]

**Let's Go To Work: The Effects of Supported Employment Treatment on Schizophrenia**  
Emily Johnson, Connor Lane - Display board [103A]

**A systematic review of available evidence of Relaxation Therapy for Insomnia in Adults**  
Rang Ly, Vincent Simone - Display board [103B]
A Systematic Review of Outcomes in Public Speaking Phobia: Efficacy of Virtual Reality Cognitive Behavioral Therapy
Kyla Phoenix, Jael Harper - Display board [103C]

The Effectiveness of Trauma-Focused Cognitive Behavioral Therapy on Children with Post-Traumatic Stress Disorder as a Result of Sexual Abuse
Brandi Saunders, Danielle Perry - Display board [103D]

Self-Esteem, Self-Concept Clarity and Interpersonal Dependency
Rosemary Al-Kire, Christopher Romero, Marilu Montoya - Display board [104A]

Self-Other Differences in Mu Suppression Do Not Require Observer-Movement
Stephen Wipf, Stephen Wipf - Display board [104B]

A Systematic Review of Cognitive Behavioral Therapy (CBT) and Adult Attention-Deficit Hyperactivity Disorder (ADHD)
Taran DePaola, Victoria Warnock - Display board [104C]

The Relationship Between Self-Report and Behavioral Measures of Creativity
Sarah Zarr - Display board [104D]

A systematic review of the available empirical research on the efficacy of behavioral parent training for attention deficit hyperactivity disorder in
Zach Taylor, Becca Richardson - Display board [SBS EASEL]

Developing a Positive Transgender Identity: A Qualitative Study of Identity Development
Kaylynne Gray, Andrew Walters - Display board [SBS EASEL]

Can I Stop Procrastination?
Krystal Burns - Display board [81B]

Behavior Change: Self-Care
Kelly Bay - Display board [81C]

Planned Change: Going From Inactive to Active
McKayla Bradley - Display board [81D]

Behavior Change Project - Healthy Living
Sarah Casey - Display board [82A]

Behavior Change: Getting Active
Briana Cuestas - Display board [82B]

Behavior Change, can we stop the addiction to technology
Amanda Fox - Display board [82C]

Overcoming the Imbalance of my World
Robin Goldfarb - Display board [82D]

Behavior Change: Family/School Priority balance
Prudence Jackson - Display board [83A]

Behavior Change: Physical Improvement
Antonio Leon - Display board [83B]

Behavior Change: Establishing a Regular Sleeping Schedule
Sarah Lytkainen - Display board [83C]

Planned Change: Working Towards A Better Me
Stefany Malatesta - Display board [83D]

Behavior Change: Praying and Mindfulness Practice
Gabriella Nunnally - Display board [84A]

Behavior Change: Study of the Bible
Sara Smith - Display board [84B]

Eating Chocolate While Doing Homework
Jazmine Williams - Display board [84C]

Behavior Change: Lower Stress Levels
Angelica Giraldo - Display board [84D]

Behavior Change: Personal fitness and Nutrition
Karely Ramirez - Display board [SBS EASEL]
**SBS- Women and Gender Studies**

*The Reality of Foster Care: How Foster Care is used to oppress communities of Color*
Regina Austin - Display board [90A]

*Disabilities in America: The Stigmatization of People with Invisible Disabilities*
Mariah Block - Display board [90C]

*Gendered Media and its Influence On Our Lives*
Jacqueline DeCross - Display board [91A]

**Marriage Equality and Immigration Status**
Alycia Lewis - Display board [91C]

*Understanding Senate Bill 1070 (SB1070)*
Lauren Walsh - Display board [92A]

**UC- University Studies**

*Communicating Visually Through Entertainment Stage Design*
Alexander Cuje - Display board [114B]

*SSLUG Action Research Team: Cold frames and Greenhouse*
Charlie Moon - Display board [113A]

*Art Historic Learning Application*
Anders Battle - Display board [114D]

*Recycling Plastic Using Pyrolysis*
Cody Reed - Display board [115B]

*HEALTH Action Research Team: Cook Book for Local Foods*
Ana Manzano - Display board [113C]

*Recruitment and Retention of Detachment 027*
Joshua Abalos - Display board [115D]

*Importance of Health and Nutrition in the Workplace*
Taylor Boyd - Display board [116B]

*An Analysis of Events at a Coffee Shop*
Siobhan Buchanan - Display board [116D]

*Stereotypes in Athletics*
Chrishay May - Display board [117B]

*The Reynolds Project*
Zach Reynolds - Display board [117D]

*The Preservation of Historical Archives, Manuscripts and Special Collections*
Juliana Godoy - Display board [118D]
Luncheon for CEFNS Presenters, Faculty Mentors, and Judges
Keynote Speaker: Michael Downey

From Airplanes, to Pine Trees, to the Pythagorean Theorem — how your education can be the first step to a great career!

Michael Downey
Senior Project Engineering Manager
Pneumatic Systems Engineering
Honeywell Aerospace, Inc.
Tempe, AZ

Friday, April 24, 2015
11:30am - 1:00pm
du Bois Ballroom

LUNCH
11:45 a.m. - 1:00 p.m.
Skydome Stage B: Honors Convocation & Awards Ceremony

11:45 a.m. - 1:00 p.m.
Skydome Stage E: University College Awards Ceremony
AFTERNOON SESSION

Non-poster listings

Skydome CAL floor

2:00pm - 4:00pm - Exhibit

**Seeing the Portrait** - CAL, Art
Elizabeth Schauer

**A Moment in Time** - CAL, Art
Danielle Mierzwa

**FAT-and That's Okay** - CAL, Theatre
Annamarie Carlson

2:00pm - 4:00pm - Performance

**A Painterly Professional** - CAL, Art
Kimberly O’Hara

**Landscape Painting** - Honors, Honors Program
Emily Wisniewski

3:00pm - 3:20pm - Performance

**BREAKING BAD OVERVIEW AND ANALYSIS**
Honors, Honors Program
Eric Siebert

Skydome Floor

2:00pm - 4:00pm - Performance

**PLAYING AROUND: Physical Approaches to Building Character Using Commedia dell'Arte and Other Physical Techniques** - CAL, Theatre

Skydome Honors Table

2:00pm - 4:00pm - Exhibit

**BREAKING BAD OVERVIEW AND ANALYSIS**
Honors, Honors Program
Eric Siebert

Skydome SBS Table

2:00pm - 4:00pm - Performance

**INVESTIGATING DIFFERENCE** - SBS, Criminology and Criminal Justice
Evan Lim, Taylor Boyer, Seth Kollman, Brody Johnson, Paul Hurd

Tenille Phillips

Search for presenters, titles, and abstracts at the event kiosks or online at nau.edu/symposium
## Skydome UC Table

2:00pm - 4:00pm - Exhibit

**Working Animals** - UC, University Studies  
Jenna Larson

## Skydome Roundtable R1

<table>
<thead>
<tr>
<th>Time</th>
<th>Discussion</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:15pm-1:45pm</td>
<td>Roundtable Discussion</td>
<td><strong>Breaking Bad and the Drug Culture</strong>&lt;br&gt;Honors, Honors Program&lt;br&gt;Cayla Washington, Luis Castillo, Kaitlyn TenHaken, Charles Molitor, Jeremiah Johnson, Michael Bulriss, Isreal Urbina-Muniz, Steven Michael Cordovanauser</td>
</tr>
<tr>
<td>3:00pm-3:25pm</td>
<td>Roundtable Discussion</td>
<td><strong>The Elephant in Our Schools: Teacher Bullying and How it Affects Students</strong>&lt;br&gt;COE, University Studies&lt;br&gt;Devon Artrip</td>
</tr>
</tbody>
</table>

## Skydome Roundtable R2

<table>
<thead>
<tr>
<th>Time</th>
<th>Discussion</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:00pm-2:25pm</td>
<td>Roundtable Discussion</td>
<td><strong>Shades of Gray: Who Pays the Price for the Disconnect In Teacher Education</strong>&lt;br&gt;COE, Teaching and Learning; Educational Specialties&lt;br&gt;Janay Wiggins, Garrett Maier</td>
</tr>
<tr>
<td>3:00pm-3:25pm</td>
<td>Roundtable Discussion</td>
<td><strong>Wolves Know No Boundaries</strong>&lt;br&gt;CEFNS, Environmental Sciences and Environmental Studies&lt;br&gt;Alysse Lerager, Christy Harvey, Rachel Heydorn, Bryan Jagiello</td>
</tr>
</tbody>
</table>

## Skydome Roundtable R3

<table>
<thead>
<tr>
<th>Time</th>
<th>Discussion</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:00pm-2:25pm</td>
<td>Roundtable Discussion</td>
<td><strong>Restraint in the Classroom</strong>&lt;br&gt;COE, Teaching and Learning; Educational Specialties&lt;br&gt;Chandler Jones</td>
</tr>
</tbody>
</table>

## Skydome Stage A

<table>
<thead>
<tr>
<th>Time</th>
<th>Presentation</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>2:00pm-2:12pm</td>
<td>Oral Presentation</td>
<td><strong>Immigration, Identity, and Inequality for Maghrabins in France</strong>&lt;br&gt;CAL, Global Languages &amp; Cultures&lt;br&gt;Ana Gonzalez-Gomez</td>
</tr>
<tr>
<td>2:12pm-2:24pm</td>
<td>Oral Presentation</td>
<td><strong>Genocide and Politics in Rwanda</strong>&lt;br&gt;CAL, Global Languages &amp; Cultures&lt;br&gt;Megan Wagy</td>
</tr>
<tr>
<td>2:24pm-2:36pm</td>
<td>Oral Presentation</td>
<td><strong>Culture in My Language</strong>&lt;br&gt;CAL, Global Languages &amp; Cultures&lt;br&gt;Katherine Wood</td>
</tr>
<tr>
<td>2:36pm-2:48pm</td>
<td>Oral Presentation</td>
<td><strong>The Importance of Slang-Education When Learning a Foreign Language</strong>&lt;br&gt;CAL, Global Languages &amp; Cultures&lt;br&gt;Sotida Arpronphalitphan</td>
</tr>
<tr>
<td>2:48pm-3:00pm</td>
<td>Oral Presentation</td>
<td><strong>Senegalese Water Quality and Resource Issues</strong>&lt;br&gt;CAL, Global Languages &amp; Cultures&lt;br&gt;Nick Reimers</td>
</tr>
<tr>
<td>3:00pm-3:20pm</td>
<td>Oral Presentation</td>
<td><strong>Ethel Smyth: The Liberation of Music and Gender</strong>&lt;br&gt;CAL, Music&lt;br&gt;Sedona Libero</td>
</tr>
</tbody>
</table>
3:20pm-3:40pm - Oral Presentation
**Gray Wolf Conservation** - SBS, Politics and International Affairs
James Etzkorn

3:40pm-4:00pm - Exhibit
**Act Your Age** - SBS, Communication
Paula Jones, Ryan Massey, Chris Binning

**Skydome Stage B**

*Breaking Bad: Insights into the TV Show*

1:15pm-1:35pm - Oral Presentation
**Breaking Bad: Analysis of Season Posters** - Honors, Honors Program
Shienna Braga, Catherine Strickler

1:35pm-1:55pm - Oral Presentation
**Breaking B[re]ad** - Honors, Honors Program
Alexis Sheffield

**Honors Approaches to Science**

2:00pm-2:20pm - Oral Presentation
**An Interdisciplinary Honors Learning Experience in Ecological Restoration** - Honors, Honors Program
Johanna Statom

2:20pm-2:40pm - Oral Presentation
**Using Journalism to Foster Science Literacy** - Honors, Honors Program
Lindsay Wilson

2:40pm-3:00pm - Oral Presentation
**Exercise vs. Cancer** - Honors, Honors Program
Sierra Sullivan

**Music, Media, and the Economy**

3:00pm-3:20pm - Oral Presentation
**Black Topaz and Its Role in Joan Tower’s Compositional Development** - Honors, Music
Phoebe Hughes

3:20pm-3:40pm - Oral Presentation
**The Portrayal of Abuse in Popular Media** - Honors, Honors Program
Liana O’Connor

3:40pm-4:00pm - Oral Presentation
**Illegal Immigration: Economic Myths Debunked** - Honors, Honors Program
Caitlin Cerra

Search for presenters, titles, and abstracts at the event kiosks or online at nau.edu/symposium
Skydome Stage C

1:30pm-1:50pm - Oral Presentation

Integrating LGBTQIA Issues Into the Choral Classroom - Honors, Honors Program
Sydney Wilson

2:00pm-3:00pm - Performance
Writing like a Beast: Hybrid Forms - Honors, Honors Program
Randy Brierley, Courtney Gage, Mara Georgeff, Sophia Licher, Anthony Porter, Samantha Schommer, Mackenzie Staires-Ziemann

3:00pm-3:10pm - Oral Presentation
Through the Eyes of Youth: Life and Death in the Bedzin Ghetto - CAL, Comparative Cultural Studies
Meaghan Scott, Amanda Williamson

Skydome Stage D

1:15pm-2:00pm - Oral Presentation
Self Portrait of America: Preserving Opportunity - Honors, Honors Program
Ellie Fuller, Gabe Hernandez, Chris Studey, Jordan Althouse

2:00pm-3:00pm - Oral Presentation
Unexpected Activism - Honors, Honors Program
Sydnie Nagore, Destiny Simpson, Ty Cureton, Kristen Kenny

Skydome Stage E

2:00pm-2:15pm - Oral Presentation
Discrimination of Woman in the Business Field - COE, Ethnic Studies
William Robbings

2:15pm-2:30pm - Oral Presentation
Feminist Movement - COE, Ethnic Studies
Samantha Boyd

2:30pm-2:45pm - Oral Presentation
Struggles and Strides of the LGBTQA Community - COE, Ethnic Studies
Joseph Mendoza, Zoe Brown, Christopher Kane

3:00pm-4:00pm - Oral Presentation
Empathy: Hinders or Helps? - Honors, Honors Program
Miranda Henry, Tatum Bardsley, Katelyn Jezowski, Lee Sayles, Elise Fraher

3:15pm-3:30pm - Oral Presentation
Paraprofessionals For Special Education - COE, Teaching and Learning; Educational Specialties
Camille Klepacz

3:10pm-3:20pm - Oral Presentation
Through the Eyes of Youth: Life and Death in the Bedzin Ghetto - CAL, Teaching and Learning; Educational Specialties
Aryn Hudak, Taylor Chesley, Jenna Wright

3:20pm-3:30pm - Oral Presentation
Through the Eyes of Youth: Life and Death in the Bedzin Ghetto - CAL, Communication
Chloe Lira, Sarah Carpenter, Michael Woody
3:30pm-3:45pm - Oral Presentation

**MR-Miseducated or Ridiculing** - COE, Teaching and Learning; Educational Specialties
Abigail Shoenhair

3:45pm-4:00pm - Oral Presentation

**Ask Us About Inclusion!** - COE, Teaching and Learning; Educational Specialties
KarenAnn Mancha, Kristen Harris, Chantelle Chandler, Madeleine Krull, Rachel Casey

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**duBois Agassiz Room**

1:30pm-1:55pm - Oral Presentation

**Vulture Mine Tailings** - CEFNS, Civil and Environmental Engineering
Audrey Lang, Nicolas Boon, Nicole Stanczak

1:55pm-2:20pm - Oral Presentation

**Prestressed Concrete Beam Design** - CEFNS, Civil and Environmental Engineering
Catherine Irvine, Abdullah Alhaddad, Brian Bloom, Mingyang Chen

2:20pm-2:45pm - Oral Presentation

**Kendrick Street Bicycle Boulevard Design** - CEFNS, Civil and Environmental Engineering
Christopher Sobie, Pierce-Jon McKelvey, Stephen Hirte, Yousef Alkandari

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1:30pm-1:55pm - Oral Presentation

**Flexible Maintenance Calendar** - CEFNS, Mechanical Engineering
Kyle Granchelli, Duke Ayers, Ryan Dooley, Kristopher Bullins, Jarrin Oishi

1:55pm-2:20pm - Oral Presentation

**Mother Road Brewing Company Sales Dashboard** - CEFNS, Electrical and Computer Engineering
Veronika Alves, Andrew Alonis, Shariq Jamil, Jason Travis

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**duBois Festival Room**

2:55pm-3:20pm - Oral Presentation

**Channel Stabilization Design for Summit Homeowner** - CEFNS, Civil and Environmental Engineering
Eric Carrasco, Eric Carrasco, Hamad Alajmi, Fatemah Husain

3:20pm-3:45pm - Oral Presentation

**Space Radiation Detection Imaging System** - CEFNS, Electrical and Computer Engineering
Jacob King, Ricardo Peterson, David Keene, Serena Saucedo, Brandon Shipman

3:45pm-4:10pm - Oral Presentation

**Cobham WiFi Project Abstract** - CEFNS, Electrical and Computer Engineering
Ronnie Hudson Jr, Hamed Alharbi, Alex Rutledge

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3:30pm-3:45pm - Oral Presentation

**Clinical Pathways Management and Simulation** - CEFNS, Electrical and Computer Engineering
Christopher Heiser, Eduardo Iniguez, Jordan Harris

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2:55pm-3:30pm - Oral Presentation

**Planifi-i: Itinerary Creation Web Application** - CEFNS, Electrical and Computer Engineering
Lane Fujikado, Mark Thompson, Sarah Kehoe, Mohammad Al-Otaibi
duBois Fremont Room

1:30pm-1:55pm - Oral Presentation
**Injection Molded Silicone Mock Vessels for In-Vitro Testing of VIABAHN Endoprostheses** - CEFNS, Mechanical Engineering
Samantha Nickerson, Ryan Geier, Jingyun Chen, Kirstin Martin, Justin Paothatat, Ryan Smith

1:55pm-2:45pm - Oral Presentation
**SAE Mini Baja** - CEFNS, Mechanical Engineering
Ricardo Inzunza, Ahmad Alnattar, Zane Cross, Kyle Egan, Nick Garry, Neil Gehr, Trevor Hochhaus, Brandon Janca, Matthew Legg, Ryan Wordern

2:55pm-3:20pm - Oral Presentation
**Mobile Computer Cart** - CEFNS, Mechanical Engineering
Trevor Scott, Mohammed Aldosari, Abdulrahman Alhamdi, Joel Asirsan, Samuel Martin

3:20pm-3:45pm - Oral Presentation
**Horizontal Test Stand Rotation Mechanism** - CEFNS, Mechanical Engineering
Nicholas Garcia, Mary Begay, Brett Booen, Calvin Boothe, James Ellis

3:45pm-4:10pm - Oral Presentation
**Mechanical Paper Shredder** - CEFNS, Mechanical Engineering
Kendall Meyer, Sultan Alshahrani, Ryan Baloo, Mohammad Molani

duBois Meadows Room

1:30pm-1:42pm - Oral Presentation
**Earthship Biotecture: Sustainable From The Ground Up** - CEFNS, Environmental Sciences and Environmental Studies
Jake Cowin

1:42pm-1:54pm - Oral Presentation
**Plant-pollinator Associations of the San Francisco Peaks: A Study of Pollination Ecology over an Elevation Gradient** - CEFNS, Environmental Sciences and Environmental Studies
Philip Minette

1:54pm-2:06pm - Oral Presentation
**Do High-Severity Fires Influence Patterns of Seedling Regeneration?** - CEFNS, Environmental Sciences and Environmental Studies
Jennifer Blanks, Suzanne Owen

2:06pm-2:18pm - Oral Presentation
**A Decade of Increased Temperature Affects Soil Fungal Communities** - CEFNS, Biological Sciences
Matthew Belus

2:18pm-2:30pm - Oral Presentation
**Reconstructing Past Environments to Understand Human Land Use: Paleoecology of Montezuma Well, Arizona** - CEFNS, Environmental Sciences and Environmental Studies
Emmett O. Tsosie, R. Scott Anderson

2:30pm-2:42pm - Oral Presentation
**The Influence of Microclimatic Factors on the Establishment of Ponderosa Pine Germinants** - CEFNS, Environmental Sciences and Environmental Studies
Sidney Michl

2:42pm-2:54pm - Oral Presentation
**Locomotor Behaviors Exhibited by California grunion (Leuresthes tenuis) During Spawning Runs on California Beaches Vary with Environmental Conditions** - CEFNS, Environmental Sciences and Environmental Studies
Andrew Johnson, Clinton Moran, Alice Gibb, Kathy Dickson

2:54pm-3:06pm - Oral Presentation
**Earthship Biotecture: Sustainable Systems Thinking within the Housing Market** - CEFNS, Environmental Sciences and Environmental Studies
Ian Smith
3:06pm-3:18pm - Oral Presentation
*Grey Whales in Clayoquot Sound, Canada: Are the moving further North?* - CEFNS, Environmental Sciences and Environmental Studies
Catherine Smolenski, Laura Feyrer

3:18pm-3:42pm - Oral Presentation
*Mortality Rates for Young Ponderosa Pine Seedlings Following Disturbance* - CEFNS, Environmental Sciences and Environmental Studies
Kendle Webster

3:42pm-3:54pm - Oral Presentation
*Where The Wild Wolves Are* - CEFNS, Environmental Sciences and Environmental Studies
Megan Starostecki

3:54pm-4:06pm - Oral Presentation
*Sea Turtle Conservation & The Promise of New Life* - CEFNS, Environmental Sciences and Environmental Studies
Samantha Davidson

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1:30pm-1:42pm - Oral Presentation
*Internship Experience: Green NAU Energy Initiative, Sustainable Behaviors Program* - CEFNS, Environmental Sciences and Environmental Studies
Rebecca Baracco

1:54pm-2:06pm - Oral Presentation
*Environmental Education in the Backcountry with NAU Outdoor Adventures* - CEFNS, Environmental Sciences and Environmental Studies
Lily Styrmoe

2:06pm-2:18pm - Oral Presentation
*Rehabilitated Houses: How are Regulation Reviews Processed?* - CEFNS, Environmental Sciences and Environmental Studies
Cory Mueller

2:30pm-2:42pm - Oral Presentation
*Sustainability in the Marketplace: A Comparison of Tuscan and American Farmers Markets* - CEFNS, Environmental Sciences and Environmental Studies
Elizabeth Olson

2:42pm-2:54pm - Oral Presentation
*Raising Community-Based Interactions through Social Events and Educational Seminars* - CEFNS, Environmental Sciences and Environmental Studies
Gabriel D'Luzansky
### 1:30pm-1:55pm - Oral Presentation

**ScreedAll** - CEFNS, Mechanical Engineering  
Daniel Deniger, Kyle Maddux, Kyle Spaulding, Luis Montano

### 2:55pm-3:20pm - Oral Presentation

**Separation of Oil from Water - H2Oleum** - CEFNS, Civil and Environmental Engineering  
Daniel Pardo, Mahdi Mohammad, Christina Holt, Ali Hasan

### 3:20pm-4:10pm - Oral Presentation

**Wildlife Telemetry Drone** - CEFNS, Electrical and Computer Engineering  
Trevor Petersen, Willem Arjana, Christopher Gass, Stephen Kuluris, Reejay Martinez, Alexander Moore, Leonard Peshlakai, Lucas Philipsen, Dylan Steyer

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**Skydome floor: Posters (2:00pm -4:00pm)**

#### CAL - Comparative Cultural Studies

- **Japanese Castle Architecture of the Momoyama Period**  
  Emily DelMonico - Display board [126D]

- **Ai Weiwei's Zodiac Heads**  
  Emily Lawhead - Display board [127B]

- **Material Culture of the Song Dynasty**  
  Clotilde Sliva - Display board [127C]

- **Ceramics in Delft: A Comparison of Chinese Export Porcelain and Imitative Dutch Ware**  
  Payton Stafford - Display board [127D]

#### CAL - English

- **iWriting Workshops**  
  Justin Kanzler, Jose Martinez - Display board [128A]

- **Pinning Motivation: An Non-academic Platform for Academic Needs**  
  Morgan Wentz - Display board [128B]

- **Interdisciplinary Student-to-Student Writing Survey**  
  Marisa Incremona - Display board [128D]

- **The Dreadful Paper: Student and Teacher Perspectives on Writing**  
  Courtney Shelton, Nicole Escamilla Guardiola - Display board [129A]

#### CAL - Global Languages & Culture

- **The Value of Oral Histories in a Global Community: Experiences from the Salvadorian Civil War**  
  Emily Wilson, Jacob Atkins - Display board [130B]
**CAL - History**

**Spain in the 1930s: Teaching History and Historical Analysis Skills Through Newspapers**  
Cheyenne Wilson, Madisen Hachey, Trey Mohoroski, Sierra Vaughn, Aaron Ferris - Display board [129C]

**CAL - Interior Design**

**Summit Care: Continuing Care Retirement Community (CCRC) & A Country Club**  
Zahra Al jubran - Display board [119B]

**Retail Store Design- Outdoors Mall**  
Juan Alonso - Display board [119D]

**Brand New School Dormitory Design in China**  
Bing Bai - Display board [120B]

**Church Design: Senior Interior Design Capstone Project**  
Shelby Butler - Display board [120D]

**Adaptive Reuse: Repurposing the Historic Barrister Place Building**  
Kendall Daniels - Display board [121B]

**Progress and Main Street Revival**  
Alayna Gronwald - Display board [121D]

**Boutique Fitness Facility: Creating a Community and Alleviating Stress**  
Jenna Hodgkiss - Display board [122B]

**POISE Salon and Spa Design**  
Alicia Ledesma - Display board [122D]

**International Airport Terminal**  
Na Lu - Display board [123B]

**Concert Venue Design for the Millennial Generation**  
Heather Pugh - Display board [123D]

**The Future is Suite: Designing the Hotel Suite of the Future**  
Tiffany Tatafu - Display board [124D]

**South Beaver School**  
Kristine Shook - Display board [124B]

**Flagstaff Women’s and Children’s Crisis Center**  
Shauna Walker - Display board [125B]

**CEFNS - Biological Sciences**

**Characterization of Antibody Distribution in an Asymptomatic, Chronic Case of Human Melioidosis**  
Karen Hernandez - Display board [17A]

**Chronic Population-level Exposure to Estrogenic Micropollutants Selects for Estrogen Exposure Resistance in a Naturally Occurring Fish Population**  
Theresa Rizza, Rex Rolan Bergamini, Catherine Propper - Display board [18A]

**The Effect of a Stand Replacing Fire on Ectomycorrhizal Fungi Inoculum Potential**  
Larrea Cottingham, Catherine Gehring, Suzanne Owen - Display board [18B]

**Development and Characterization of Microsatellite Markers for the Leech, Helobdella stagnalis**  
Kelsey Banister, Erik Lehmkuhl, Rebecca Beresic-Perrins - Display board [18C]
Bateman's Principle and the Effect of Polyandry on Male Fitness in the Marine Isopod, Paracerceis sculptra
Adrianna Nimer, Stephen Shuster, Robert Prather - Display board [18D]

Effects of Mimulus guttatus Physical and Chemical Defense Traits on a Generalist and Specialist Herbivore
Jocelyn Garcia, Liza Holeski - Display board [16B]

A Survey of the Prevalence and Diversity of Clostridium difficile in Flagstaff Dogs
Cara Alboucq, Dave Wagner, Joseph Busch, Nathan Stone - Display board [12A]

From the Soil to Cystic Fibrosis Patients: Antibiotic Resistance in Burkholderia vietnamiensis
Madeline Lummis, Carina Hall, Joseph Busch, Jason Sahi, Theodore Spilker, John LiPuma, Mark Mayo, Bart J. Currie, Paul Keim, David M. Wagner - Display board [12B]

Identifying the Genetic Basis for Flea-borne Transmission in Plague
Andrew Rivera, Ekaterine Zhgenti, Dawn Birdsell, Roxanne Nottingham, Ekaterine Khaladze, Gvantsa Chanturia, Stephen Beckstrom-Sternberg, James S. Beckstrom-Sternberg, Jason Sahi, Merab Kekelidze, Paata Imnadze, Mikeljon Nikolich, Paul Keim, David M. Wagner - Display board [12C]

Genetic Characterization of Yersinia pestis in Brazil
Brian Thompson, David Wagner, Paul Keim, Andrew Rivera, Roxanne Nottingham, Amy Vogler, Alzira Almeida - Display board [12D]

Possible Infection of Leeches by Amphipod Parasites at Montezuma Well, AZ
Lindsey Stolze, Rebecca Beresic-Perrins - Display board [13A]

Immune Antibody Response in a Melioidosis Goat Model to Targeted Set of Burkholderia pseudomallei Protein Antigens
Mitchell Keener, Mukoma Simpanya, Jinhee Yi, Mark Mayo, Joseph Busch, Erik Settles, Bart Currie, Richard Bowen, Paul Keim - Display board [13B]

Is There Anything a Skunk Won’t Eat?: Potential for Rabies Transfer via Scavenging of Dead Bats
Annie Dyer, Tad Theimer - Display board [13C]

Exercise-induced Stimulation of Gene Expression: Comparison Between Whole Blood Versus Isolated Mononuclear Cells
Jenna Plummer, Aaron Done, Nathan Nieto, Tinna Traustadottir - Display board [13D]

Analysis of Enclosure Conditions for the Construction of a Thamnophis rufipunctatus Vivarium
Hannah Wilson, Tonya Keno - Display board [14A]

Genetic and Geographic Distribution Differences of Coxiella burnetii Among US Milk Samples with a Focus on Indiana
Sonora Olivas, Amy Bauer, Heidi Hornstra, Paul Keim, April Johnson, Talima Pearson - Display board [14B]

The Effects of Wastewater Effluent on Gonadal Development in the American Bullfrog (Rana catesbeiana)
Tomoko Wilson, Tanya Sutton, Catherine Propper - Display board [14C]

Revisiting Sperm Limitation in Parasitic Wasps
Shaunna Greene, Zane Holditch - Display board [14D]

In-vitro Wound Healing Scratch Assay Using Platelet-rich Plasma Demonstrates Expedited Wound Closure
Bronson Pinto - Display board [15A]

Manipulation of the L-Arginine Pathway by Toxoplasma gondii
Inez Pabian - Display board [15B]

Ectoparasitism and Vector-borne Pathogens in Northern Arizona Predator-Prey Cycles: Epizootiological Risk to Reintroduced Black-footed Ferrets
James Franklin, Ryan Hogans - Display board [15C]
The Prevalence of Tick-borne Pathogens Found in Rodentia spp. in Regions of Northern Arizona
Rhea Zagar, Carter Hranac, Benjamin Turner, Ashley Gundersen, Nathan Nieto - Display board [15D]

Have Substrate-feeding Killifishes (Cyprinodontiformes) Lost the Ability to Suction Feed?
Ana Ronan, Amber Jones, Alice Gibb - Display board [16A]

The Metaboreflex is Not Enhanced During Exposure to Moderate Altitude
Kathryn Chancey, Dannette Allen - Display board [16C]

Development of an In Vitro (Bench-top) Assay to Evaluate the Effects of Reactive Oxygen Species on Fibroblast Cultures
Kristina Galbreath, Robert Kellar, Aaron Tabor - Display board [16D]

Detection Methods of Coccidioides from Soil Samples, the Causative Agent of Valley Fever
Stephanie Rivas, Katy Parise, Paul Keim, Bridget Barker - Display board [17B]

Arthropod Pollinators Influence the Pollination Nature of Angiosperms Along the C. Hart Merriam
Jillian Mondrow, Ella Stephens - Display board [17C]

Using Digital Histopathology to Determine Biocompatibility of Tropoelastin and Collagen Implants
Kyle McMinimy, Robert Diller, Robert Kellar - Display board [17D]

CEFNS - Chemistry and Biochemistry

Quantification of Uranium in Unregulated Wells on the Navajo & Hopi Reservations
Erik Peaches - Display board [27B]

Influence of the Role of dehydroshikimate dehydrogenase in Production of P-carboxymuconic acid from D-glucose Using an Escherichia coli heterologous h
Gustavo Canales, Kellan B. Finney, Kinya Hotta, David T. Fox - Display board [25B]

Pharmaceutical Phosphines for Faster Formulation: Palladium-Phosphonium Complexes and their Medical Impacts
Samantha Kruse, Thomas Haden, Loren Reichsfeld - Display board [26B]

Quantification of Uranium in Soil Collected Near an Abandoned Uranium Mining Site in Leupp, AZ on the Navajo Reservation.
Alanna Koritzke, Andee Lister, Jani Ingram - Display board [26D]

Transitioning to NAU in STEM: Transfer-GEMS
Alexander Ollerton, Meghan Belmares - Display board [27D]
**BioEnergy and Wastewater Management**
Emily Day, Emily Day, Liam Bewick, John Santoro, Daliza Jeffrey, Sun Kyu Ham, Jarrod Yazzie - Display board [9A]

**Preventing Cattle Disease: A Lesoit, Tanzania Project**

**Moringa Seed Project**
Erin McAnally-Trejo, Amanda Sagrilo, Natana Caren De Castro, Lucas Ramos - Display board [11B]

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**CEFNS - Civil Engineering, Construction Management, and Environmental Engineering**

**NASA Radiation Absorption in Tissue Samples: Measurement of Radiation Flux**
Keith Caldwell, Trevor LaBanz, Austin Rhodes, Josiah Sellstrom, Katherine DeFonce - Display board [9A]

**Implant Battery Charger GUI Research & Development**
Robert Winkler, Nancy McCollough, Kevin Meyer, Tomas Zukowski - Display board [9B]

**Interactive Point Visualization**
Tim Velgos, Erin Bailey, Curtis Bilbrey, Alex Farmer - Display board [9C]

**Increasing Taxonomic Resolution of Microbial Communities**
Karthik Handady, Ian Humphrey, Cate Holcomb, Ryan Buckingham, Crystal Hepp - Display board [9D]

**EcoPod Development for Copper Canyon Mexico**
Amanda Harrison, Amanda Harrison, Matthew Rodgers, Michael Robinson, Dustin Morris, Andrew Atkinson, Eric Rich-Plotkin - Display board [11C]

**Sinclair Wash Restoration Project**
Leah Richardson, Hasan Mohammad, William King, Holly Swenson - Display board [11D]

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**CEFNS - Electrical and Computer Engineering**

**SciViewer**
Alex Lanza, Austin Sanders, Leah Kalush, Justin Liddicoat - Display board [10B]

**Child Mobility Project: Learning Through Assisted Movement**
Jessica Randolph, Kohlton Gray, Brad Turcott, Dale Mongeau, Brian Gilpin - Display board [10C]

**Automatic Syllabification**
Salvatore Bottiglieri, Michael Albanese, Drew McDaniel, Trent Cooper, Adam Thomas - Display board [10D]
Tracking Winter Bird Population Movement Via Feeder Observation
Brett Ireland, Trevor Glynn, Melissa Fisher - Display board [6A]

Take Back the Tap Campaign at Northern Arizona University
Bobbi Wilson, Katie Cloud, William Pleitgen - Display board [6B]

Is Conventional Landscaping More Efficient Than Low Impact Landscaping?
Bryan Jagiello - Display board [6C]

Change the World Project: Cans to Cans
Dohna Bicoy, Carter Doud, Daniel Kimball - Display board [7A]

Raising Awareness on Cycling Safety within the Flagstaff Community
Randi Ryan, Jackson Bain, Renee LeQuense - Display board [7B]

Citizen Science: The FeederWatch Project Through The Cornell Lab of Ornithology
Michelle Bem, Benjamin Pelletier - Display board [7C]

Crayfish Abundance in Water with High Carbon Dioxide Concentrations in Central Arizona
Solan Watts, Charles Drost - Display board [7D]

Northern Mexican Gartersnake Public Outreach Project
Traci Swift, Niki Ortega, Ansley Roberts - Display board [8A]

The Impacts of Snowmaking on the San Francisco Peaks
Claire Silvernale, Dezirea Acker, Shannon Rivers - Display board [8B]

Flagstaff EcoRanch Fall Internship 2014: Tangible, Local and Sustainable Solutions
John Christ - Display board [8C]

Citizen Science: Feeder Watch, Studies in Migration Patterns
John Christ, Solan Watts, Sara Krznarich - Display board [8D]

Can Acoustic Vibrations Affect the Growth of Fungi?
Brennan Copp, Richard Hofstetter - Display board [19B]

Using Growth Releases to Identify Disturbance Events in Southwestern Dry Mixed-conifer
Michael O’Reilly - Display board [19D]

A Comprehensive Study of Two Columnar Jointing Locations to Determine Differences in Rate of Cooling
Brittany Meucci - Display board [23B]

Flow Relations of the Hoxworth Springs
Garrett Erickson - Display board [23D]

A new large armored fish from the Devonian (380 Ma) Martin Formation of Mt. Elden
Dylan Mills - Display board [24B]

Receiver Function Analysis
Alden Netto, Ryan Porter - Display board [24D]

The Mystery of Transverse Aeolian Ridges on Mars
Justin Wilgus, Paul Geissler - Display board [25D]
CEFNS - Green Fund

Refill at Cline Library: Water Bottle Fill Stations and Reducing Waste
Jill Friedmann, Lauri Budzinski - Display board [1B]

Solar Hot Air Heaters
Rachelle Berry - Display board [2B]

CEFNS - Mathematics and Statistics

Prime Vertex Labelings
Emily White, Hannah Prawzinsky, Michael Hastings, Levi Heath, Nathan Diefenderfer, Alyssa Whittemore, Briahna Preston - Display board [22B]

Eisenstein Amicable Pairs
Zachary Parker, Jordan Hunt - Display board [22D]

CEFNS - Mechanical Engineering

Developing an Alternative Powered Mobility Device for Disabled Children
Sarah Hanson, Marissa Brzozowy, Justin Mully, Nabeal Sunna - Display board [1D]

Micro Wind Turbine
Jorge Vielma, Hussain Mohammad, Alex Hunter, Hengming Dai, Alyosha Sandigo - Display board [4C]

NASA Human Exploration Rover

Parabolic Trough - Tracking and Energy Extraction
Jairo Rivera-Mendez, Saad Almonneay, Robert Blaskey, Daniel Chief, Christopher Mesko, Jacob Seitzer - Display board [5A]

2nd Generation Charging Station
Ruben Villezcas, Jasem Alhabshy, Riyadh Alzahrani, Brandon Gabrelcik, Ryan Murphy - Display board [3C]

AquaScooter
Corey Jones, Meagan Morrison, Sydney Kemper, Tyler Furuya, Troy Ballard - Display board [5C]

SAE Aero Design Regular Class
John Nichols, Mitchell Thune, Carlen Cyphers, Michael Schauer, Seth Lawrence, Todd Gonzalez - Display board [4A]

Aquascooter 2.0
Elizabeth Tyler, Dylon Cannon, Darin Gilliam, Eli Palomares, Jiyan Wang, Tyler Winston - Display board [5D]

CEFNS - Physics and Astronomy

Real-Time Surface Profiling of Industrial Materials Using Digital Holography
Tressa Mackin - Display board [20B]

Search for Central Pit Craters on Saturn’s Icy Moons
Sierra Ferguson, Nadine Barlow - Display board [21B]

Development of a Spectrophotometric Data Reduction Pipeline
Ryan Buckingham - Display board [20C]

Breaks in Radial Stellar Surface Brightness in Spiral Galaxies.
Brian Barandi - Display board [21D]
Representation of Latino/a Culture at NAU  
Ashleigh Burchfield - Display board [50A]

The American Indian Pursuit of Higher Education  
Clark Williams - Display board [50C]

The Arts and Academics  
Sarah DeVita, Beth Pickens, Kelsey Hecker - Display board [51A]

Is All Transition Planning Successful?  
Rebecca Fawcett - Display board [51C]

Being Smart with Art: How Art Programs Affect the Pursuit of Higher Education  
Tricia Ochi - Display board [52A]

How to preserve Traditional Knowledge in Indigenous Communities by Promoting Language and Their Linkage to Ecology?  
Juan Carrillo - Display board [52C]

Fairness in Latina Families  
Gradi Moore - Display board [53A]

Black Lives Matter: Stories From Flagstaff  
Rahmaan Muhammad - Display board [53C]

Disability in the Classroom  
Alexa Olsen - Display board [54A]

Disability Studies  
Jori Misiuk, Mary Lauderdale, Violet Hays, Courtney Mazzacane, Erica Grove, Katie Cuppy - Display board [54C]

Through the Public Eye  
Karely Rodriguez, Heather Hatcher, Emily Nelson, Kiersten Gaetano, Cristina Guerrero - Display board [55A]

Being LGBTQ at NAU  
Paige Stewart - Display board [55C]

Wendy's v. DavCo  
Justin Goff, Justin Johnson, Tobias Martinez, Nikolas Rabyada - Display board [28A]

Brain Injuries in Professional Sports  
Rachel Jacobs, Bradley Van Deinse, Lauren Glick, Emily Lewandowski - Display board [28B]

Antitrust Law in Professional Sports  
Clayton King, Mackenna Tally, Jonathan Shimek, Emily Zamora - Display board [28C]

3-D Printing  
Daniel Phillips, Jayna Schmitt, Carissa Halliday, Jack Jess - Display board [28D]

Rebeca Pieropan, Kevin Romacker, Lauren Bruni, Conrad Scott - Display board [29A]

Construction Contract Breaches Involving Questions of Due Diligence  
Mathilde Pioux, Luka Radjenovich, Jakob Klein, Jonathan Schwartz - Display board [29B]

Copyright Infringement in the Music Industry  
Megan Volin, Jasmine Handy, Grace Aire-Oaihimore, Qingmiao Yang - Display board [29C]
<table>
<thead>
<tr>
<th>Title</th>
<th>Speaker</th>
<th>Display Board</th>
</tr>
</thead>
<tbody>
<tr>
<td>Civil Asset Forfeiture</td>
<td>Clayton Vossberg, Torrey Westfall</td>
<td>[29D]</td>
</tr>
<tr>
<td>Gambling with Water in the Desert</td>
<td>Khaled Alsabah</td>
<td>[30A]</td>
</tr>
<tr>
<td>The Central Arizona Project</td>
<td>Caitlin Cerra</td>
<td>[30B]</td>
</tr>
<tr>
<td>An Economic Analysis of Colorado Water Issues</td>
<td>Christopher Dosdall</td>
<td>[30C]</td>
</tr>
<tr>
<td>Economic Analysis of Superfund Sites</td>
<td>Michelle Hagan</td>
<td>[30D]</td>
</tr>
<tr>
<td>Issues in the Mono and Grant Lakes</td>
<td>Hannah Hutchison</td>
<td>[31A]</td>
</tr>
<tr>
<td>Water Issues in Lake Mead-An Economic Perspective</td>
<td>Victor Iniguez</td>
<td>[31B]</td>
</tr>
<tr>
<td>Water Issues in the West: Desalination</td>
<td>Alejandro Jacquez</td>
<td>[31C]</td>
</tr>
<tr>
<td>Reducing Water Use with Better Irrigation</td>
<td>Charles Kelley</td>
<td>[31D]</td>
</tr>
<tr>
<td>Santa Catalina Island Water Management</td>
<td>Miller Olsen</td>
<td>[32A]</td>
</tr>
<tr>
<td>Water Crisis in Africa</td>
<td>Aubrie Perea</td>
<td>[32B]</td>
</tr>
<tr>
<td>The Risks and Safety Protections of Arizona Water</td>
<td>Rebeca Pieropan</td>
<td>[32C]</td>
</tr>
<tr>
<td>Economic Analysis of Desalination in California</td>
<td>Chris Salters</td>
<td>[32D]</td>
</tr>
<tr>
<td>Behavioral Economics and Water Markets</td>
<td>William Shainin</td>
<td>[33A]</td>
</tr>
<tr>
<td>Desalinization of Water in the West</td>
<td>Garrett Storr</td>
<td>[33B]</td>
</tr>
<tr>
<td>Water Consumption</td>
<td>Bob Urbon</td>
<td>[33C]</td>
</tr>
<tr>
<td>NAWAPA: Not Because It is Easy, But Because It is Hard</td>
<td>Adrian Verduzco</td>
<td>[33D]</td>
</tr>
<tr>
<td>Desalination Projects in the World</td>
<td>Zijing Wang</td>
<td>[34A]</td>
</tr>
<tr>
<td>The Public Choice Aspect of the Mountain Line Bus System</td>
<td>Erika Desabrais, Victor Iniguez</td>
<td>[34B]</td>
</tr>
<tr>
<td>A Case Study in Public Choice Theory of the Flagstaff Aquaplex</td>
<td>William Wilson, Christopher Dosdall</td>
<td>[34C]</td>
</tr>
<tr>
<td>An Analysis of Las Vegas Hospitality Water Sustainability</td>
<td>Brendan Moore</td>
<td>[35A]</td>
</tr>
<tr>
<td>Recycling in Flagstaff: A Case Study in Public Choice Theory</td>
<td>Cole Swearingen, Morgan Wam</td>
<td>[35C]</td>
</tr>
<tr>
<td>Why Flagstaff Should Not be a Dark Sky City</td>
<td>Nicholas Walker, Kurt Van Denburg</td>
<td>[35D]</td>
</tr>
<tr>
<td>Flagstaff’s Troubling Bed, Board and Booze Tax</td>
<td>Rachel Welsh, Tyler Pledger</td>
<td>[36A]</td>
</tr>
<tr>
<td>The Privatization of the Flagstaff Airport</td>
<td>Kyler Doan, Quinn Tanner</td>
<td>[36B]</td>
</tr>
<tr>
<td>Public Choice Aspects of Road Privatization</td>
<td>Ryan Newland, Dakota Chavez</td>
<td>[36C]</td>
</tr>
<tr>
<td>San Diego Desalination Plant</td>
<td>Kyler Doan</td>
<td>[FCB EASEL]</td>
</tr>
<tr>
<td>Water Feasibility Analysis of Algae as a Bio-Fuel</td>
<td>Ryan Newland</td>
<td>[FCB EASEL]</td>
</tr>
</tbody>
</table>

2015 UNDERGRADUATE SYMPOSIUM

POSTER LISTINGS: AFTERNOON SESSION | 47
POSTER LISTINGS: AFTERNOON SESSION

Search for presenters, titles, and abstracts at the event kiosks or online at nau.edu/symposium

### FCB - Business - Management

**Privatizing Grand Canyon Water Supply**  
James Rodriguez, Anthony Javier  
Display board [34D]

**Emotions**  
Duane Higdon, Andrew Nielsen, Sam Slager, Adam DeSerio, Davis Boyer  
Display board [36D]

**Jack’s Colors**  
Sean Bozigian  
Display board [37A]

### FCB - Business - Marketing

**Market Research for Lowell Observatory**  
Kayla Boxberger, Summer Anderson  
Display board [37D]

**Marketing Research Design of Project: Lowell Observatory**  
Daren Darnell, Justin Sieczkowski, Mitch Pike, Rayan Alawi  
Display board [38A]

**Who is Coming to Lowell?**  
Muhammad Darwish, Chet Johnson, Min Hee Kim  
Display board [38B]

**Lowell Observatory Research**  
Paige Nasuta, Danielle Doty, Eduardo Viramontes, Joshua Benally  
Display board [38C]

**Lowell Observatory Market Research**  
Aydee Palomino, Brandon Ingraham, Alex Williamson, Kevin Donley  
Display board [38D]

### FCB - Business - Finance

**A Financial Analysis of Expedia’s Acquisition of Orbitz**  
Brendan Moore  
Display board [35B]

**An Analysis of Ethnic Diversity within the W. A. Franke College of Business**  
Alex LaRosa, Brian Williams, Taylor Tracy  
Display board [37B]

**Business Leadership Program**  
Blake Skorich  
Display board [37C]

**Business Relations: Ethics**  
Connor Campbell, Tyler Eink  
Display board [40D]
**Brownsberg EcoTourism Facility Design**
Jessica Hardi, Jessica Hardi, Matthew Langenbach, Kacy Aoki, Evan Kaichi, Dohna Bicoy, Steven Goettl, Darren Frankenburger - Display board [40A]

**Ecotourism Facility in Copper Canyon Mexico**
Claudia Jurowski, Connor Nelson, Zane Grenner-Oyer, Kailey Fuller, Vanessa Pacheco, Adam Stalzer - Display board [40C]

**Experiential Ecotourism in Copper Canyon Mexico**
Claudia Jurowski, Matthew Shaw, Peter Baroldy, Jordan Calka, Timothy Patridge - Display board [40B]

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### Honors - Honors Program

**Conquerors or Settlers? Two Visions of the American Frontier**
Carl Thomson - Display board [110D]

**Nature and Mental Health**
Corinne Bright, Karolina Pieja - Display board [111A]

**The Effect of Nature on Human Happiness and Spirituality**
Jessica Chamberlain, Trevor Wilson, Mary Koehler - Display board [111B]

**The Physical Human and Nature**
John Condon, Alvaro Alvarez - Display board [111C]

**Reconciling with Nature**
Joseph Felton, Emily Haworth, Scott Judge - Display board [111D]

**The Truth About Climate Fiction**
Elizabeth Stapleton, Cara Pocano - Display board [112A]

**Children in Nature**
Jason Yubeta, Maranda Breese, Paige Kimble - Display board [112B]

**Touchdowns and Traumatic Brain Diseases: A Look at Chronic Traumatic Encephalopathy In the National Football League and Beyond**
Elora Palmer - Display board [112C]

**Joint Angles and Jump Variation Between Wildtype and Mutant Mouse MDM Genotypes.**
Zachary Fader, Michael Isbell, Kiisa Nishikawa, Cinnamon Pace - Display board [112D]

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### SBS - Anthropology

**Human Archeology of Sexuality**
Elizabeth Torres - Display board [69C]

**Fighting for Freedom in Namibia**
Alyssa Anthony - Display board [62A]

**The Neo-colonial Menu: The Colonization of Your Grocery List**
Nicholas Fisher - Display board [62B]

**Environmental Anthropology, from Pigs to Policies**
Kristian Cordell, Vanessa Stoyanof - Display board [62C]

**Georgia’s Indigenous Relations; Past and Present.**
Ehren Keltz - Display board [62D]

**Native Tours**
Alexis Orozco - Display board [63A]

**What The Fall of Oil Prices Means for Angola**
Stefan Rosic - Display board [63B]

**African Anthropology**
Kraig Shirley - Display board [63C]
Environmental Anthropology
Elizabeth Ford, Mikayla Hirschel - Display board [63D]

The Archaeology of Music
Austin Adib - Display board [64A]

Archeology of Sexuality
Madison Breuer - Display board [64B]

The Prehistory of Death and the Afterlife
Timothy Carlson - Display board [64C]

Did the Cavemen Believe in God?
Sheridan Couture - Display board [64D]

The Archaeology of Weapons and Warfare
Michael Dobiecki - Display board [65A]

The Archaeology of Music
Tony Geroulis - Display board [65B]

The Prehistory of Animal Domestication
Kaylen Goetzke-Rux - Display board [65C]

Archeology of music
Elena Gray - Display board [65D]

Death and Afterlife in Prehistory
Cristina Guerrero - Display board [66A]

Archaeology of Weapons and Warfare
Kortney Haines - Display board [66B]

The Archaeology of Music
Isabella Holmes-DiGiovine - Display board [66C]

Prehistoric Food and Nutrition
Alicia Johnson - Display board [66D]

The Prehistory of the Domestication of Animals
Rebecca Klein - Display board [67A]

Lifestyles/Diet of Modern Humans
Toby Lopez - Display board [67B]

The Evolution of Sex - As Told By Rubbish and Rarities
Riley McAuliffe - Display board [67C]

To the Point
Tayler Porter - Display board [67D]

The Prehistory & Morphological Evolution of the Domestication of Animals
Sean Ramey - Display board [68A]

The Archaeology of Weapons and Warfare
Alexandra Simon - Display board [68B]

Prehistory of Death and the Afterlife
Michelle Suyama - Display board [68C]

Anthropology Project
Fernando Vergara - Display board [68D]

Religion and Spirituality in Prehistory
Cody Werner - Display board [69A]

The Natural History of Humans and Horses
Kasey Williams - Display board [69B]

The Zapotec of Ixtepeji, Mexico: Material Culture and the Archaeological Record
Barbara Arriaga Espinoza - Display board [69D]

Why Must I? An Examination of the Illicit Drug Trade in the United States
Alexander Ballesteros - Display board [70A]

Archaeological Preservation: The Importance of Protecting the Archaeological Record in Danger Prone Areas
Vincent Gentile - Display board [70B]

The Maasai of East Africa: The Material Culture and Archaeological Correlates of a Herding Society
Maisie Kulpinski - Display board [71A]

Simple Subsistence: Material Correlates of the Washo Lifestyle
Sean Golightly - Display board [70D]

The Inuit of the Northern Arctic: Material Culture and the Archaeological Record
Maisie Kulpinski - Display board [71A]

The Huron of the Great Lakes Region: The Archaeological Correlates of a Tribal Society
Pamela Miller - Display board [71B]
The Archaeological Problem of Groundless Archaeology: Ethnoarchaeological Investigations into the Kombai of West Papua.
Amy Roy - Display board [71C]

The Sami of Scandinavian Europe: Archeological Correlates of the Symbolism of a Semi-Nomadic Tribal Society
Chandler Trotter - Display board [71D]

Ethnography of the Comanche Indians
Allison Trottier - Display board [72A]

Interdisciplinary Perspectives in Biomedical Anthropology
Ariel Apple, Alison Steinbacher - Display board [72B]

The People's Production Co.
Tate Larrick - Display board [72C]

Biting Off More Than We Can Chew: Food Culture in America
Genevieve Alagna - Display board [72D]

Hadza: Tanzanian Hunter-gathers
The Last of the First
Brooke Barteaux, Emily Stevens - Display board [73A]

NAFTA and its Impacts on the United States and Mexico
Erin Comprosky - Display board [73B]

Traditional Maya Medical Practices, Ethnobotany, and Western Medicine
Emily Fowler - Display board [73C]

Extermination of the California Indians during the Gold Rush (1850-1860)
Dorothy Kilgore - Display board [73D]

Witchcraft in Modern Day Africa
Amanda Fox - Display board [SBS EASEL]

Themes of Structural Violence and Struggles of Love in Northeastern Brazil
Alison Steinbacher - Display board [SBS EASEL]

Abandoned Uranium Mines on the Navajo Nation
Andria Begay, Chelsi Tsosie - Display board [74B]

Factors Affecting Contemporary Navajo Nation Elections
Briana Ashley-Willie - Display board [74D]

Tribes and Historic Preservation: American Indian Religious Freedom Act
Kaitlyn Haskie - Display board [75B]

1680 - The Fight for Decolonization Continues
Geoffrey Kie - Display board [75D]

Hawaiian Sovereignty
Deann Nishimura Thornton - Display board [76B]

Natural Remedies are Better For You
Tyanna Billy - Display board [76D]

Native American Community
Alissa Sage - Display board [77B]

The Prehistory of Monumental Architecture
Megan Loeffler - Display board [77D]

Re-Presentation of Gender: Persuasion of Medial Campaigns
Mackenzie Olson, Alexis Montano, Edward Horn - Display board [80C]

When It’s Hard to Talk, It’s Up to Us to Listen: An Analysis of the Advocacy Groups Against Domestic Violence
Alexandria Saquella, Chelsea Hightower - Display board [80D]

Impacts on the Adjustment of International Students
Kiley Westby, Lawreca Jones, Chloe Hotman - Display board [81A]
POSTER LISTINGS: AFTERNOON SESSION

Search for presenters, titles, and abstracts at the event kiosks or online at nau.edu/symposium

**SBS - Criminology and Criminal Justice**

*The Criminal Justice and Criminology College Based Learning Community*
Paige Annunziato, Keith Hullenaar - Display board [85B]

**Working through Roommate Disagreements**
Brianna DeBenedetto, Daniel Delgado, Danielle Treto, Ian Ross - Display board [85D]

**Conflict Management Workshop for High Stress Environments**
Manuel Juarez, Jordan Juarez, Dominic Petrini, Joe Gorski, Leroy Guenther, Alex Holmes - Display board [86B]

**Getting to Yes**
Rachel Melton, Alex Garcia, Kyle Collingwood, Elizabeth Lozano, Derick Souza - Display board [86D]

**Implementing an Alternative Dispute Resolution Approach within Residence Life**
Alfredo Navarro, Alexis Juergens, Ledu Tomeletso, Jazmine Mincey, Courtney Martin - Display board [87B]

**Conflict Management Conference**
Harrison Stewart, Vernon Jamison, Jasmine Barnes, Joslyn Harris, Blair Wishom - Display board [87D]

**Alternative Dispute Resolution Club 'Getting To Yes!'**
Santana Yazzie, Jessica Bush, Grant Pooley, Brittany McKee - Display board [88B]

**SBS - Geography, Planning, and Recreation**

**Economic and Environmental Impacts of the Slide Fire, 2014**
Robb Faus - Display board [89B]

**Baja for Sale**
Riley Sawyers - Display board [89D]

**SBS - Institute for Human Development**

**Explicit Vocabulary Instruction Embedded in Narrative Language Intervention**
Chelsey Gardner, Kylie Suter - Display board [88D]

**An Examination of the Transferability of Military Experience to Civilian Job Success**
Kaitlin Fitzgerald, Richmond Barkemeyer, Michelle Chavez, Zachary Klnefelter, Angela Milkie - Display board [92D]

**A Systematic Review of Cognitive Therapy for Obsessive-Compulsive Disorder in Adults**
Amanda Bermudez, Allie Jessen - Display board [102A]

**Priming a Behavioral Freeze Response in Humans**
Victoria Pocknell, Alexis Sanchez - Display board [93A]

**Inclusion of Romantic Partner in the Self, Emotional Dependency, and Relationship Satisfaction**
Christopher Cuellar, Justin Jones, Matthew Valente - Display board [93B]
Research Proposal: Illusions in The Eyes of Schizophrenia  
Ariel Bachmann - Display board [93C]  

Research Proposal: Personality and Magic  
Lara Creaser - Display board [93D]  

Narcissism; A Review in Pathology of Self-deception, Deception and Manipulation  
Jill Griffin - Display board [94A]  

Patrick Johnson - Display board [94B]  

The Effect of Saccade-Induced Retrieval Enhancement on False Memory  
Brianna Layser - Display board [94C]  

Research Proposal: Autism: Perceiving Moving objects  
Amy Parra - Display board [94D]  

Research Proposal: False Memory and Eyewitness Interviews  
David Pipitone - Display board [95A]  

Men, Magic, and Control  
Tate Reed-McDorman - Display board [95B]  

Research Proposal: The Psychological Consequences of Change Blindness  
Carina Stihl - Display board [95C]  

How Do You Sleep?  
Grant Satterthwaite - Display board [95D]  

Schizophrenia and Magic  
Christina Swanson - Display board [96A]  

Life Satisfaction and Pet Ownership  
Shameka Brinson, Tara Blank, Liliana Berzunza, Ross Thomas, Shameka Brinson - Display board [96B]  

Qualities in Short-term and Long-term Relationships  
Nicholas Garver, Nicole Lavigne, Kyle Brandt, Gilbert Hays - Display board [96C]  

Is Volunteer Bias a Source of Concern in Friendship Research?  
Andrew Haynes, Meliksah Demir - Display board [96D]  

Students' Perceptions of Effective Study Strategies  
Michael Jacobson, Nicole Bies-Hernandez - Display board [97A]  

Primary Reasons for Exercise and Its Relationship to Self-esteem  
Mahjabeen Qazi, Mariah Calvani, Mackenzie Florence, Denny Little - Display board [97B]  

Human Sexuality  
Kylie Stradling, Kelsey Landstrom, Hollie White, Taylor Brooks - Display board [97C]  

The Influence of Visual and Auditory Cue Salience on Iowa Gambling Task Performance  
Ashley Averett, Trinity Frazee, Tiana Hans - Display board [97D]  

The Effects of Self-Esteem and Introversion on Romantic Relationship Duration  
Brianna Barrios, Stephanie Kemsley, Marisa Bracewell, Keaton White - Display board [98A]  

Gender and Academics: Effects on Preferred Characteristics in Mates  
Caroline North, Kellie Garrett, Karimme Delgado - Display board [98B]  

Emotional State Affects Moral Judgments  
Manda Robbins, Jennifer Goedinghaus, Dana Dal Soglio, Erik Vessey - Display board [98C]  

Cue-based Differences in Memory Monitoring Accuracy  
Emily Wilson, Crystal Reynolds - Display board [98D]  

The Effects of Physical Attraction on Forgiveness in a College Population  
Christopher Winters - Display board [99A]
**Body Image in Hispanic and Latino/ Latina College Students**  
Brianda Vargas, Martha Trujillo  
- Display board [99B]

**Keep Calm and Focus: The Effects of Doodling on Memory**  
Anna Robertson, Julianna Aliberti, Genoveva Machado - Display board [99C]

**The Efficacy of Individual Versus Group Treatment Regarding Motivational Interviewing for Adolescents with Substance Use Disorder: A Systematic Review**  
Matthew Valente, Zach Kaiser - Display board [99D]

**Academic Dishonesty as Moderated by Anonymity**  
Josiah Huggins - Display board [100A]

**Married Army Couples Program: Perceptions, Experiences, Impacts and Suggestions from Dual-Military Couples**  
Alicia Parrott, Mariana Bosch Y Gutierrez, Timothy Broom, Blake Miley - Display board [100B]

**Do College Students' Level of Alcohol Consumption Depend Upon Peer Pressure or Self-esteem?**  
Carlene Sachs, Sharcie Coker, Tahnee Noe - Display board [100C]

**The Relationship Between Masculininty and Female Leadership Moderated by Self-Efficacy**  
Sayer-Jane Vermeer, Cayden Cupper, Adisen Hennessy, Ricki Steffan, Shelby Nowell - Display board [100D]

**The Couple’s Path to an Alcohol Free Life: A systematic review of Behavioral Couples Therapy for Treating Alcoholism**  
Kaleigh Hartzell, Christopher Placker - Display board [101A]

**How Well Do You Know Yourself: A Study on Attraction**  
Leigh Irons, Tierra Fairman, Paige Cencelewski, Elizabeth Lozano - Display board [101C]

**Moody Munching: How Emotions Affect Eating**  
Danielle Misiak, Ashley Stanley, Marissa Hall - Display board [101D]

**Professor-Student Rapport, Perceived Autonomy Support, and Student Outcomes**  
Shelby Burton, Meliksah Demir, Nora Dunbar - Display board [102B]

**How Effective is Psychoeducation in the Treatment of Adults with Bipolar Disorder? A Systematic Review of Empirical Research**  
Jasmine De La Torre, Tiana Hans - Display board [102C]

**Family-Focused Therapy: Childhood and Adolescent Bipolar Disorder**  
Olivea Howland, Kayla Ziolko - Display board [102D]

**An Exploration of the Efficacy of Cognitive-Behavioral Therapy for Juvenile Obsessive-compulsive Disorder**  
Terry Laws, Sarah Brown - Display board [103A]

**An Examination of Empirical Research Regarding Applied Behavioral Analysis on Children with Autism Spectrum Disorder**  
Tami McBride, Kaylee Smith - Display board [103B]

**A Qualitative Review of Published Research on Electronic Nicotine Delivery Systems (ENDS): An Analysis of a Rapidly Expanding Literature**  
Lauren Ryan, Allie Jessen, Ashley Hanlon - Display board [103C]
Is Dialectical Behavior Therapy Worth the Time Invested? A Systematic Review of Available Evidence
Abigail Swigart, Keira Lowry - Display board [103D]

Identity and Cohesion Within the Workplace
Rosemary Al-Kire - Display board [104A]

Self-Other Differences in Beta Enhancement/Suppression Do Not Require Movement Execution
Stephen Wipf, Victoria Lopez, Stephen Wipf - Display board [104B]

Event-Related Desynchronization and Correlates of Self-Other Differences
Taran DePaola, Dylan Barbera - Display board [104C]

The Correlation of Religiousness and Kaufman’s Domains of Creativity Scale
Alexis Romero - Display board [104D]

A Systematic Review of the Efficacy of Prolonged Exposure Therapy on Veterans with Post-Traumatic Stress Disorder
Madison Theis, Shayna Maniscalco - Display board [SBS EASEL]

Minor Investments
Ashley Arnold - Display board [81B]

Planned Behavior: Dealing with Stress
Amanda Boelter - Display board [81C]

Overcoming Stress: A Planned Change Project
Savannah Brewer - Display board [81D]

Behavior Change: Daily Fitness
Kaitlyn Crawford - Display board [82A]

Planned Behavior Change: Cutting back on fast food meals
Chelsea Dyer - Display board [82B]

Planned Behavior Change: Over Analyzing Personal Conversations and Interactions
Jennifer Hudak - Display board [82D]

Morning Preparedness
Carly Lenhardt - Display board [83A]

Behavior Change: Study Habits
Rachel Liewer - Display board [83B]

Eat Your Greens to Fit in Your Jeans!
Briana Lytton - Display board [83C]

Planned Change: Regular Outdoor Activity
Kaleigh Nielsen - Display board [83D]

Stretch It Out
Sarah Sattler - Display board [84A]

Self - Care
Shanell Tisdale - Display board [84B]

Behavior Change: Living a Healthy Lifestyle
Kirsten Olivarez - Display board [84C]

Gender Tropes In Video Games: A Sociological Examination
Marissa Martinez, Nathaniel Douglas - Display board [84D]

Behavior Change: Shopping/Spending
Carolina Flores - Display board [82C]
SBS - Women and Gender Studies

**Fossil Fuel Economies and Women's Rights in the Middle East**
Danielle Austin - Display board [90B]

**Machoism in the Chicano Culture: The Violence to Chicana Women**
Alexander Castillo - Display board [90D]

**Discovering Trans*Erasure in the Historiography of Stonewall**
Kourtney Dunning - Display board [91B]

**Who's Lives Really Matter?**
Gabriella Nunnally - Display board [91D]

**Black Feminism: A Starting Point to Freedom**
Kathleen Watkins - Display board [92B]

**Filipino Women in Feminism**
Kristina White - Display board [92C]

UC - University College

**Immigration Action Research Team**
Karla Rodriguez - Display board [113B]

**Community Gardens Action Research Team: Living the Good Life**
Veronica McKinney - Display board [113D]

**Does Increased Physical Activity Decrease the Symptoms of Parkinson's Disease?**
Jillian Quinn - Display board [114A]

**Health Affects of Uranium Mining**
Hilary Armenta - Display board [114C]

**Facing Parkinson's Disease: An Interdisciplinary Approach to Returning Quality of Life to Those Effected and Their Care-givers**
Paul Dunn - Display board [115A]

**Perpetuation of Culture in Polynesia**
Keola Pontes - Display board [117C]

**Arts within Arizona State Public School Curriculum**
Jacqueline Richwine - Display board [118A]

**Universal Design as a Standard**
Matthew Yaney - Display board [118C]
ACCESSIBILITY INFORMATION

Walkup Skydome
- Parking: Lot P66 (SE of the building) is the closest
- Entrance: Accessible entrance E side of building
- Elevator: Yes
- Restrooms: on Concourse level

duBois Center
- Parking: Lot P45 (S of the building) is the closest
- Entrance: Accessible entrance SW side of building
- Elevator: Yes
- Restrooms: on 1st floor
THANK YOU

We wish to thank the faculty, staff, graduate students, judges, volunteers, moderators, and student ambassadors, without whom this event would not have been possible.

A special thanks goes to the Organizing Committee, especially Becky Butcher, MaryLynn Quartaroli and Rob Morrison, and to all the faculty mentors, individuals, companies, organizations, and grant programs that assisted students in the completion of their internships or their research, creative, and design projects.

2015 JUDGES

We gratefully acknowledge the following faculty, staff, alumni, and friends who volunteered to judge for CEFNS, HHS, and SBS. Thanks, also, to the volunteers who signed up after the program print deadline and could not be acknowledged.

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