



Office of
UNDERGRADUATE RESEARCH
THE UNIVERSITY OF UTAH

2017 Undergraduate Research Symposium

**TUESDAY, APRIL 4, 2017
9:00AM - 2:30PM
OLPIN UNION
UNIVERSITY OF UTAH**



2017 UNDERGRADUATE RESEARCH SYMPOSIUM

Tuesday, April 4, 2017

9:00am – 2:30pm

Olpin Union

University of Utah

We are grateful for the generous support of:



We would like to acknowledge the Office of the President, the Office of the Senior Vice President for Academic Affairs, and the Office of the Vice President for Research.

Finally, we would like to extend our utmost pride and congratulations to the students, graduate students, and faculty mentors without whose efforts and dedication this event would not be possible.

THANK YOU, DONORS!

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2017 UNDERGRADUATE RESEARCH SYMPOSIUM PROGRAM SCHEDULE

NOTE: All student presenters **MUST** check-in

Snacks available at 10:30am and 1:30pm in the Main Ballroom

SESSION I 9:00 – 10:30am

8:30am

Check-in

Union Corridor

8:45 – 9:00am

Poster Setup

Main Ballroom

9:00 – 10:30am

Poster Session I

Main Ballroom

9:00 – 10:30am

Oral Session I

Parlor A, Collegiate Room, Room 312, Room 319

SESSION II 10:45 – 12:15pm

10:15am

Check-in

Union Corridor

10:30 – 10:45am

Poster Setup

Main Ballroom

10:45 – 12:15pm

Poster Session II

Main Ballroom

10:45 – 12:15pm

Oral Session II

Parlor A, Parlor B, Collegiate Room, Room 312, Room 319

SESSION III 1:00 – 2:30pm

12:30pm

Check-in

Union Corridor

12:45 – 1:00pm

Poster Setup

Main Ballroom

1:00 – 2:30pm

Poster Session III

Main Ballroom

1:00 – 2:30pm

Oral Session III

Parlor A, Collegiate Room, Room 312, Room 319

2017 UNDERGRADUATE RESEARCH SYMPOSIUM SCHEDULE OF PRESENTATIONS

ORAL SESSION I

9:00 – 10:30am

PARLOR A

Moderator: **Andrew Merryweather**, Department of Mechanical Engineering

- 9:00am **Rachel Huynh** (Alan Dorval)
Department of Bioengineering
A Novel Protocol to Modify Multi-Neural Connectivity using Spike-timing-dependent Plasticity
- 9:20am **Jayden Plumb** (Ashley Spear)
Department of Mechanical Engineering
3D Grain Characterization of Open Cell Aluminum Foam
- 9:40am **Nathan Porter** (Elijah Millgram)
Department of Philosophy
Life with No Strings Attached: Nietzsche and the Eternal Recurrence
- 10:00am **Sarah Patterson** (Danielle Endres)
Department of Communication
Ute Nickname Research Project: The Rhetoric Surrounding the University of Utah's Nickname on Social Media and its Influence on Representation of the Northern Ute Nation

COLLEGIATE ROOM

Moderator: **Tim Chambless**, Department of Political Science

- 9:00am **Morgan Lami** (Stephen Tatum)
Department of English
Subverting the Stereotype: Sherman Alexie's An Absolutely True Diary of a Part Time Indian

- 9:20am **Daniel Christensen** (Therese De Raedt)
Department of Languages & Literature
The Franco-German Identity of Alsace-Lorraine: A Literary Analysis
- 9:40am **Jonah Katz** (Margaret Wan)
Department of Languages & Literature
Defining Space: Boundary and Enclosure in Dream of the Red Chamber
- 10:00am **Anna Mala** (Margaret Wan)
Department of Languages & Literature
The Usage of the Supernatural in Pu Songling's and Gogol's Short Stories

ROOM 312

Moderator: **Catherine Sherwin**, Department of Pediatrics

- 9:00am **Petra Soininen** (Balamurali Ambati)
Department of Ophthalmology & Visual Sciences
Photobiomodulation therapy for diabetic retinopathy
- 9:20am **Paisley Tarboton** (Alex Shcheglovitov)
Department of Neurobiology & Anatomy
Examining apoptotic cells in cortical organoids
- 9:40am **Steffan Sowards** (Colleen Farmer)
Department of Biology
Computational Fluid Dynamics Simulation of Python Respiratory System
- 10:00am **Michael Zhao** (Gordan Savin)
Department of Mathematics
Pointed Hermitian Spaces and Optimal Embeddings

ROOM 319

Moderator: **Claudia Geist**, Department of Sociology

- 9:00am **Heidi Qin** (Delores Delgado Bernal)
Department of Education, Culture & Society
Queer and Trans Students of Color: Survival and Resistance in Predominately White Institutions
- 9:20am **Kimberly Sholler** (Sarah Creem-Regehr)
Department of Psychology
A Comparison of Types of Low Vision on Spatial Learning while Navigating
- 9:40am **Aaron Cardenas-Paredes** (Theresa Martinez)
Department of Sociology
Religious Teachings, Perceptions, and Intimate Partner Violence: A Pilot Project
- 10:00am **Warren Jensen** (Claudia Geist)
Department of Sociology
"Determined to Make Righteous Homes": LDS expressions of masculinity and family formation

ORAL SESSION II

10:45 – 12:15pm

PARLOR A

Moderator: **Stacy Manwaring**, Department of Communication Sciences & Disorders

- 10:45am **Tisileli Tuifua** (Dimitri Trankner)
Department of Human Genetics
A Flexible and Inexpensive Setup to Quantify Cognitive Behaviors in Mice
- 11:05am **Megan Dearden** (Ravi Ranjan)
Department of Cardiovascular Medicine
Studying the Relationship between Scar Tissue Formation and Catheter Contact Force for Ablation Procedures
- 11:25am **Joshua Winger** (Mike Scarpulla)
Department of Materials Science & Engineering
Novel Cadmium Telluride Processing Method: Strip Annealing with High Power Lamps
- 11:45am **Brianna Potter** (Keunhan Park)
Department of Mechanical Engineering
Nanoscale Graphene Thickness and Electrical Behavior

PARLOR B

Moderator: **Jane Hatter**, Department of Music

- 10:45am **Jay T Anderson** (Elizabeth Tashjian)
Department of Finance
Abnormal Stock Returns and Hurricanes - Event Study of the Five Most Destructive Hurricanes to Make Landfall in the U.S. Since 2005
- 11:05am **Darlene Castro** (Jane Hatter)
Department of Music
The Sound and the Fusae: Music Notation as a Means of Time Travel

11:25am **Collett Litchard** (Christie Toth)
Department of Writing & Rhetoric Studies
*Identifying Effective Social Media Writing by Utah Cities to Implement
Change and Increase Voter Engagement*

COLLEGIATE ROOM

Moderator: **Michael Gills**, Honors College

10:45am **Shaela Adams** (Michael Gills)
Honors College
Honors Novel Writing Workshop

10:55am **Samantha Duzy** (Michael Gills)
Honors College
City Pallor - A Novel

11:05am **Dalton Edwards** (Michael Gills)
Honors College
We Were Maniacs

11:15am **James Ehlers** (Michael Gills)
Honors College
Cyclicity

11:25am **Jenna Gardner** (Michael Gills)
Honors College
Engaging the Novel Writing Process

11:35am **Emad Jabini** (Michael Gills)
Honors College
Made in America

11:45am **Madeline Lehman** (Michael Gills)
Honors College
Honors Novel Workshop

11:55am **Michelle Rohbock** (Michael Gills)
Honors College
Novel Writing Workshop

ROOM 312

Moderator: **Karen Krapcho**, Department of Biology

- 10:45am **Ethan Frehner** (Çağan Şekercioğlu)
 Department of Biology
Subterranean Caching of Domestic Cow Carcasses by American Badgers in the Great Basin Desert of Utah
- 11:05am **Alex Hyer** (William Brazelton)
 Department of Biology
Metagenomic Characterization of Serpentinization-Influenced Groundwater collected at the Coast Range Ophiolite Microbial Observatory
- 11:25am **Rahee Kim** (Ansuk Jeong)
 Department of Psychology
Psychosocial Adaptation after Mastectomy
- 11:45am **Ciriac Alvarez Valle** (Theresa Martinez)
 Department of Sociology
Undocumented Undergraduates at the University of Utah

ROOM 319

Moderator: **Andrey Rogachev**, Department of Physics & Astronomy

- 10:45am **Jessica Schulze** (Ryan Steele)
 Department of Chemistry
Computational Investigation of Quantum Motion in Iron Hydrides and Hydrogenation Catalysis
- 11:05am **Sabastian Atwood** (Carleton DeTar)
 Department of Physics & Astronomy
Employing the S-Step Conjugate Gradient Method to Solve Quark Propagators
- 11:25am **Jamie Dyer** (Kyle Dawson)
 Department of Physics & Astronomy
Spectral Variation of Quasars With Multi-Epoch Analyses

11:45am **Alexis Wilson** (Anil Seth)
Department of Physics & Astronomy
*West Antarctica as a Natural Laboratory for Single- and Mixed-Phase
Cloud Microphysics*

ORAL SESSION III

1:00 – 2:30pm

PARLOR A

Moderator: **Ole W Fischer**, Department of Architecture

- 1:00pm **Hannah Van Hollebeke** (Mike Shapiro)
Department of Biology
Variation in Beak Morphology in Domestic Pigeons
- 1:20pm **Zach Clegg** (Ole Fischer)
Department of Architecture
Manifesting Nationalism During Interwar Germany and the United States (1933-1939): Memorializing, Maintaining and Investing Nationalism Through Architecture
- 1:40pm **Annika Erickson** (Bill Oakley)
Department of Marketing
Case study: An attempt to change the marketing paradigms for manufacturing as a career path
- 2:00pm **Christina Jones** (Lela Graybill)
Department of Art & Art History
Evelyn De Morgan's Portrait of Jane Morris (Study for The Hourglass) and the Politics of Gender in Pre-Raphaelite Art

COLLEGIATE ROOM

Moderator: **Alexis Christensen**, Department of Worlds Languages and Cultures

- 1:00pm **Sally Goodger** (Maera Shreiber)
Department of English
The Holocaust and Identity in Young Adult Fantasy Novels
- 1:20pm **Peter Davidson** (Jeff Metcalf)
Department of English
Diego's Dream

- 1:40pm **Emma Martin** (Jerry Root)
Department of Languages & Literature
Medieval Perspectives in Religious and Secular Contexts: the Legend of Theophilus and the Romance of the Rose
- 2:00pm **Alexandria DeGrauw** (Maureen Mathison)
Department of Writing & Rhetoric Studies
Tracking Student's Responses to Hot Topics in Science

ROOM 312

Moderator: **Ka-Ho Wong**, Department of Neurology

- 1:00pm **Kevin Yang** (John Symons)
Department of Nutrition and Integrative Physiology
Exercise-Training Increases Basal Autophagy in Endothelial Cells of Adult Mice
- 1:20pm **Dakota Crocker** (Catherine Loc-Carrillo)
Department of Pathology
A Comparison of BMD Changes During Local Versus Systemic Antibiotic Treatments for Osteomyelitis
- 1:40pm **Itzel Estrella** (Peter Jenkins)
Department of Radiology
Radiation Doses For Nuclear Medicine Procedures: A Compiled Resource
- 2:00pm **Katherine Coombs** (Ana Sanchez-Birkhead)
Department of Nursing
Understanding Breast Cancer disparities among Latina women

ROOM 319

Moderator: **Jennifer Seagrave**, Undergraduate Studies

- 1:00pm **Satin Tashnizi** (Tim Chambless)
Department of Political Science
Mobilizing Generation Y - Bringing Polling locations to Campus

- 1:20pm **India Young** (Matthew Basso)
Department of History
From Genealogy to Family History: How 1970s Family History Practices Filled the Void in an Age of Social Fracture
- 1:40pm **Emilia Tugolukova** (Jesse Rowley)
Department of Biology
The Role of Drp1 in Platelet Formation
- 2:00pm **Tyler Crum** (John Parkinson)
Department of Biology
Mutational Analysis of a Highly Conserved Glycine Residue in the Serine Receptor of Escherichia coli

POSTER SESSION I

9:00 – 10:30am

MAIN BALLROOM

- Poster 1: **Alec Hansen** (Man Hung)
Department of Orthopaedics
Impact of the Bundled Payment System on Today's World of Healthcare
- Poster 1: **Dominique Nielson** (Man Hung)
Department of Orthopaedics
Impact of the Bundled Payment System on Today's World of Healthcare
- Poster 2: **Adam Thorne** (John Langell)
Department of Bioengineering
Visual Light Phototherapy Catheter Research
- Poster 3: **Elizabeth Aviles** (Carolyn Bliss)
LEAP
CMV in Utah Research Study
- Poster 4: **Diane Dohee Jeong** (Ansuk Jeong)
Department of Psychology
College students' stress and their psychosocial behavior
- Poster 4: **Je uk Ryu** (Ansuk Jeong)
Department of Psychology
College students' stress and their psychosocial behavior
- Poster 5: **Cecily Bader** (Martin Horvath and Leslie Sieburth)
Department of Biology
The Response Of Arabidopsis Mutant Bps 1-2 On Salt Media
- Poster 6: **Jane Baer** (Kathleen Ritterbush)
Department of Geology & Geophysics
Deposition and Preservation of Spicules Within Biosilicious Glass Ramps

- Poster 7: **Tyler Bean** (John David Symons)
Department of Nutrition and Integrative Physiology
Histological evaluation of tissues from mice with temporal deletion of Atg3 specifically in endothelial cells
- Poster 8: **John Beaufort** (Wayne Potts)
Department of Biology
Father's Social Status Influences Offspring Growth Rate in Wild-derived Mice
- Poster 9: **Amanda Bischoff** (Matthew Sigman)
Department of Chemistry
Predicting the Selectivity of the Bis(pyridine) Silver Permanganate Mediated Oxidation of Dimeric Diketopiperazine Derivatives
- Poster 10: **Hailey Blair** (Cagan Sekercioglu)
Department of Biology
Biodiversity Along The Wildland-Urban Interface Of Red Butte Creek
- Poster 11: **Madison Weaver** (Ryan Schacht)
Department of Anthropology
Changing Fertility to Save the Climate
- Poster 11: **Judy Chen** (Ryan Schacht)
Department of Anthropology
Changing Fertility to Save the Climate
- Poster 11: **Annie-Louise Holbrook** (Ryan Schacht)
Department of Anthropology
Changing Fertility to Save the Climate
- Poster 12: **Trevor Bonn** (John David Symons)
Department of Nutrition and Integrative Physiology
Coronary vascular function is improved in ischemic patients after continuous-flow left ventricular assist device (LVAD) implantation
- Poster 13: **Clayton Booth** (Akiko Kamimura)
Department of Sociology
Refugee Oral Health

- Poster 14: **Jerry Bounsanga** (Man Hung)
 Department of Orthopaedics
Meaningful interpretation of the PROMIS and legacy scales for musculoskeletal care
- Poster 15: **Amber Bowler** (Thomas O'Hare)
 Department of Oncological Sciences
Ponatinib resistant BCR-ABL1 compound mutations can be overcome by ABL001 allosteric inhibition in conjunction with low-dose ponatinib therapy in Philadelphia chromosome-positive leukemia
- Poster 16: **Hayden Brady** (Bruce Gale)
 Department of Mechanical Engineering
Utilization of Fluid Dynamic Testing to Improve Fluid Transport on Microfluidic PCR Chips
- Poster 17: **Cedar Briem** (Andrea Brunelle)
 Department of Geography
Staley Spring Sediment Core Analysis
- Poster 18: **Paige Brimley** (Jules Magda)
 Department of Chemical Engineering
Synthesis of Hydrogels in Yeast Media
- Poster 19: **Jared Bunn** (Jeff Bates)
 Department of Materials Science & Engineering
Hydrogel Stability for Sensors as a Function of the Mechanical Swelling Response
- Poster 20: **David Burkhardt** (Taylor Sparks)
 Department of Materials Science & Engineering
Porous Hydrogel Synthesis for Controlled Bacteria Release
- Poster 21: **Gemma Clark** (Jennifer Weidhaas)
 Department of Civil & Environmental Engineering
A Study of Contaminants in Rooftop Rainwater Runoff
- Poster 22: **Julia Cortino** (Osama Abdullah)
 Department of Bioengineering
Using Fourier Transform to Expedite Cell Width Measurement

- Poster 23: **Molly Davis** (Carol Sansone)
Department of Psychology
Exploring how first-generation college students motivate themselves in academic settings
- Poster 24: **Rachel Davis** (Angela Smith)
Department of English
Fiction Seeps into Reality: Traumatic Media in The Babadook and The Ring
- Poster 25: **Christine DeDen** (Benjamin Ellis)
Department of Bioengineering
Finite Element Analysis of Lamellae Fiber Angles in Lumbar Intervertebral Discs
- Poster 26: **Henry Doan** (Carolyn Bliss)
LEAP
Molecule Mechanisms of Muscle Fatigue
- Poster 27: **Grant Doxey** (Diane Pataki)
Department of Biology
The Nitrogen Content of Urban & Riparian Soils
- Poster 28: **Connor Dustin** (Sujee Jeyapalina)
Department of Bioengineering
Percutaneous Bone Anchored Implants - A Method for Understanding Epithelial Down-growth and Attachment Locations
- Poster 29: **Colter Dye** (Amy Sibul)
Department of Biology
Kestrels on Campus
- Poster 30: **Chris Eixenberger** (Vladimir Hlady)
Department of Bioengineering
Immobilized Heparin's Effect in Attenuating Upstream Platelet-Agonist Interactions

- Poster 32: **Arelys Desouza** (Carolyn Bliss)
LEAP
The Impact of an Undergraduate Volunteer in Third Grade Classroom on Awareness of Higher Education
- Poster 32: **Sydney Magana** (Carolyn Bliss)
LEAP
The Impact of an Undergraduate Volunteer in a Third Grade Classroom on Awareness of Higher Education
- Poster 33: **Erin Feeley** (Cheryl Wright)
Department of Family & Consumer Studies
The Development of an Employment Assessment Tool for Young Adults with Autism
- Poster 34: **Elizabeth Fine** (Jerry Root)
Department of Languages & Literature
In His Own Hands: Images Of Hands In The Legend Of Theophilus
- Poster 35: **Zippy Ford** (Kate Canas)
Department of Management
Why the Wage Gap?
- Poster 36: **Heilly Galvez** (Jaclyn Winter)
Department of Medicinal Chemistry
Analysis of Ectoine Derivative Biosynthesis in Actinomycetes Through Media Changes and Cell Mechanics Model Analysis
- Poster 37: **Logan Gaykowski** (Robin Jensen)
Department of Communication
Birth Control and Depression
- Poster 38: **Dietrich Geisler** (Zvonimir Rakamaric)
Department of Computing
Formal Verification of the Floating Point Type in Boogie and SMACK
- Poster 39: **Matthew Givens** (Kam Leang)
Department of Mechanical Engineering
Empirical Characterization of Ground Effects for Quadcopter Drones

- Poster 40: **Matthew Godinez** (Ron Hughen)
 Department of Anesthesiology
Muscle Fatigue
- Poster 41: **Astin Goff** (Alexa Doig)
 Department of Nursing
The Cost of Responding to Clinical Alarms in the Hospital Environment
- Poster 42: **Forrest Gowen** (Melissa Cortez)
 Department of Neurology
Analysis of autonomic biomarkers in concussion
- Poster 43: **Yushan Gu** (Man Hung)
 Department of Orthopaedics
Exploring the Psychometric Properties of the PROMIS Pain Interference Instrument in an Orthopaedic Population
- Poster 44: **Christopher Haisley** (Brian Coddling)
 Department of Anthropology
To Guard or Not to Guard? Territorial Behavior in Foraging Societies
- Poster 45: **Shelby Harris** (Joel Miller)
 Department of Chemistry
Phenalenyl Complexes for Organic Magnets
- Poster 46: **Catherine Heiner** (Heather Bruce)
 Department of Writing & Rhetoric Studies
Man Up: How Ideas of Masculinity Impact Conversations on Sexual Violence
- Poster 47: **Hannah Hendrickson** (Stephen Goldsmith)
 Department of City & Metropolitan Planning
Improving Health Outcomes for the Homeless
- Poster 48: **Michael Herron** (Benjamin Ellis)
 Department of Bioengineering
Development of Pediatric Cervical Spine Models for Use in Finite Element Analysis

- Poster 49: **Austin Holmes** (Brian Coddling)
Department of Anthropology
*Examining Disproportionate Proximal Impacts of Uranium Mining
Relating to Socioeconomic Status on the Navajo Nation*
- Poster 50: **Julie Imig** (Inese Ivans)
Department of Physics & Astronomy
Galactic Evolution of Phosphorus and Sulfur Using Star Clusters
- Poster 51: **Devin Davis** (Joseph Tonna)
Department of Surgery
Family Satisfaction with Care in the Intensive Care Unit
- Poster 51: **Tyson Lambert** (Joseph Tonna)
Department of Surgery
Family Satisfaction with Care in the Intensive Care Unit
- Poster 52: **Jake Immonen** (Swomitra Mohanty)
Department of Chemical Engineering
*Integrating Smartphone Technology in Chemical Engineering Research,
Education and Outreach*
- Poster 53: **Katharin Jensen** (Kam Leang)
Department of Mechanical Engineering
*Coverage Planning with Applications in Environmental Monitoring
Using Aerial Robots*
- Poster 54: **Sergio Juarez** (Vandana Ramachandran)
Department of OIS
*Empirical Analysis Of The Participation Behaviors Of Investors On
Crowdfunding Platforms*
- Poster 56: **Arezu Kazerooni** (Carolyn Bliss)
LEAP
The Study of Atrial Fibrillation (Still in the works)
- Poster 57: **Danielle Kfoury** (Alexa Doig)
Department of Nursing
*Improving Medication Understanding and Adherence with Pictograph
Stickers*

- Poster 58: **Scott Khuu** (Rodney Stewart)
Department of Oncological Sciences
Identifying Retinoic Acid Dependent Mechanisms of NC EMT
- Poster 59: **LeAnn Lam** (Robby Bowles)
Department of Bioengineering
Treating Back Pain using CRISPR Epigenome Editing to Restore Extracellular Matrix in Degenerated Intervertebral Discs
- Poster 60: **Bryce Larson** (Julie Barkmeir-Kraemer)
Department of Surgery
Use of dynamic real-time MRI to image speech mechanisms in the presence of vocal tremor
- Poster 61: **Roxanne Lebenzon** (Jack Broughton)
Department of Anthropology
Taxonomic identifications of two species of Neotoma using geometric morphometrics
- Poster 62: **Marley Lebrecht** (Sheila Crowell)
Department of Psychology
The Effect of a Close Friendship on Number of Suicide Attempts in Adolescent Girls
- Poster 63: **Elliot Lee** (Nels Elde)
Department of Human Genetics
Signs of Molecular Arms Races in Immunity Genes
- Poster 64: **Tanner LeSueur** (David Krizaj)
Department of Ophthalmology & Visual Sciences
TRPV4 mediates mechanical ocular injury following exposure to high-pressure blast trauma
- Poster 65: **Conor Lyne** (Adam Meirowitz)
Department of Finance
ISIL, Inc. - The Finance of Terror

- Poster 66: **Kyle McDougle** (Lauren Clark)
Department of Nursing
Disclosing News of a Child's Diagnosis of Down Syndrome or Spina Bifida
- Poster 67: **Trevin Michael** (Simon Fisher)
Department of Endocrinology
Novel Treatment options in the Reduction of Neuron Damage Caused by Hyperinsulinemic Hypoglycemia
- Poster 68: **Matthew Miller** (Anne Yeagle)
Department of Economics
The Affordable Care Act And The Future Of Us Healthcare: Consumer Driven Care And Value Driven Care
- Poster 69: **Robert Moesinger** (Alan Dorval)
Department of Bioengineering
Novel Method of Murine Gait Analysis
- Poster 70: **Alexandra Moody** (Jesse Rowley)
Department of Pulmonary
The Impact of Mitofusin 2 on Complex 1, and other Mitochondrial Proteins
- Poster 71: **Uriel Morales** (Michelle Mendoza)
Department of Oncological Sciences
Differential Regulation of Tumor Invasion by RSK Family Isoforms
- Poster 72: **Mikala Mortensen** (James Gardner)
Department of Music
Challenges in Playing the Flute and Their Specific Application to Solo Flute Literature
- Poster 73: **Max Mroz** (Shad Roundy)
Department of Mechanical Engineering
Exploration of Magnetic Field Actuated Strings of Spherical Magnets for Swimming Robot Locomotion

- Poster 74: **Jennifer Ellen Mueller** (Anandh Babu Pon Velayuthm)
 Department of Nutrition and Integrative Physiology
Strawberry supplementation reduces blood pressure in diabetic db/db mice
- Poster 75: **Jiyeon Mun** (Yukio Saijoh)
 Department of Neurobiology & Anatomy
Investigating heparan sulfate structural determinants in mouse models
- Poster 76: **Elizabeth Nakashima** (Johanna Watzinger-Tharp)
 Department of Linguistics
Reclamation of Negative Speech in the LGBTQ+ Community
- Poster 77: **Michael Navidomskis** (Jennifer Follstad Shah)
 Department of Geography
An Isotopic Analysis of the Jordan River Nitrogen Cycle
- Poster 79: **Yenni Nguyen** (Jeff Weiss)
 Department of Bioengineering
Riboflavin Collagen Gels Using 2D Plastic Compression
- Poster 80: **Yolancee Nguyen** (Sheri Holmen)
 Department of Surgery
Dissecting the function of different AKT isoforms in melanoma metastasis
- Poster 81: **Madeleine Odette** (Eric Garland)
 Department of Social Work
Neural Mechanisms of Mindfulness-Oriented Recovery Enhancement Therapy
- Poster 82: **Eve Olson** (Rachel Hayes-Harb)
 Department of Linguistics
Voice Onset Time in Arabic and English Stop Consonants
- Poster 83: **Elaine Ong** (Clement Chow)
 Department of Human Genetics
Identifying genetic modifiers influencing retinal degeneration diseases

- Poster 84: **Patricia Pedersen** (Jeffrey Moore)
 Department of Geology & Geophysics
Reconstructing the Devils Castle rock avalanche, Albion Basin, Utah
- Poster 85: **Anny Pham** (Alessandra Angelucci)
 Department of Ophthalmology & Visual Sciences
Projection of Information in Visual Cortex of Macaque Monkey: Building Circuit Diagrams of the Visual System
- Poster 86: **Christopher Quach** (Alex Shcheglovitov)
 Department of Neurobiology & Anatomy
Potential Link of MAPK Genes to Phelan-McDermid Syndrome
- Poster 87: **Emir Rahislic** (Kevin Whitty)
 Department of Chemical Engineering
Development of a Copper-Based Oxygen Carrier for Chemical Looping with Oxygen Uncoupling
- Poster 88: **Alexandria Redd** (Aster Tecle)
 Department of Social Work
Promoting Intercultural Communication Between Refugees and Their Host Counties
- Poster 89: **Nicholas Ridge** (Colleen Farmer)
 Department of Biology
Computational Simulation of Airflow in Pogona vitticeps (Bearded Dragon)
- Poster 90: **Jessica Roestenburg** (Franz Goller)
 Department of Biology
Testing the Perceptual Salience of Spectral Content in Zebra Finch Song
- Poster 91: **Amira Sabry** (Junco Warren)
 Department of Internal Medicine
Role of The Histone Methyltransferase Smyd1 in Transcriptional Regulation of Cardiac Metabolism
- Poster 92: **Samah Safiullah** (Stephen Goldsmith)
 Department of Architecture
Transportation Discrimination and Apartheid in US Metropolitan Areas

- Poster 93: **Jane Saviers-Steiger** (Tomasz Petelenz)
Department of Bioengineering
Material Testing and Prototyping for a Flexible Load Evaluation Transducer
- Poster 94: **Kali Scott** (Sydney Cheek-O'Donnell)
Department of Theatre
You Do You: A Theoretical Exploration Of Audience Agency In Theatre
- Poster 95: **Artemis Sefandonakis** (Jill Shea)
Department of Surgery
Fat transplant for glitazone delivery and adiponectin production to inhibit breast cancer cells
- Poster 96: **Stephanie Shelton** (Michelle Wolfe)
Department of History
Viewing People as Property: Slave Life Insurance and Industrialization 1830-1861
- Poster 97: **Saeed Shihab** (Derek Dossdall)
Department of Bioengineering
Developing a data acquisition system to analyze of Cardiac Signals in Real Time Through Automated Activation Maps using the Utah Electrode Array (UEA)
- Poster 98: **Alison Shimko** (Sean Redmond)
Department of Communication Sciences & Disorders
Sex as a Potential Source of Bias in Adult Judgments of Children with and without Neurodevelopmental Disorder
- Poster 99: **Pei-Yu Shyu** (Craig Dworkin)
Department of English
Electronic Experimental Literature: A Tale of Endings and Beginnings
- Poster 100: **Alexa Sime** (Shane Macfarlan)
Department of Anthropology
Inter-Group Biases, Group-Level Reputations and Parochial Altruism

- Poster 101: **Justin Skinner** (Andrew Anderson)
Department of Orthopaedics
Quantification of Bone Morphology of the Talus and Calcaneus using Statistical Shape Modeling
- Poster 102: **Amber Staples** (Daniel Scoles)
Department of Neurology
Understanding Stress Granule Formation in Spinocerebellar Ataxia Type II Patient Cells
- Poster 103: **Asia Susko** (Carolyn Bliss)
LEAP
Role of Bcl2 in Synovial Sarcomagenesis
- Poster 104: **Jason Chieh Sheng Tey** (Yan-Ting Shiu)
Department of Internal Medicine
Degree of Damaged Collagen in Pre-surgical and Post-Surgical Arteriovenous Fistula Vessels in Rats with Chronic Kidney Disease
- Poster 105: **Justin Tse** (Tom Alberts)
Department of Mathematics
Last Passage Percolation
- Poster 106: **Felix Vivanco** (Norman Waitzman)
Department of Economics
Healthcare Disparities among Latinos in Utah
- Poster 107: **Shannon Weaver** (Akiko Kamimura)
Department of Sociology
Self-Reported Diagnosis of Type 1 and Type 2 Diabetes and Lifestyle Change Among Uninsured Primary Care Patients
- Poster 108: **Tyler Gill** (Charlie Hicks-Little)
Department of Exercise & Sport Science
Vertical Jump comparing ground reaction force with height and weight
- Poster 109: **Nathan Wilkinson** (Ashley Spear)
Department of Mechanical Engineering
Applying Machine Learning to Microstructurally Small Fatigue Crack Propagation in 3-D

- Poster 110: **Shane Williams** (Shad Roundy)
Department of Mechanical Engineering
Modeling of Kinetron microharvester
- Poster 111: **Savannah Williams** (Edmund Fong)
Department of Political Science
American Exceptionalism and Its Role in Foreign Policy and Culture
- Poster 112: **Paul Wissler** (Robert Bowles)
Department of Bioengineering
Epigenome editing of TGF-beta receptors using the dCas9-KRAB system to alter mesenchymal stem cell differentiation potential
- Poster 113: **KayLene Yamada** (Denise Dearing)
Department of Biology
Comparing Tolerance Of Native Versus Native Toxic Diets In Neotoma Lepida
- Poster 114: **Jonathan Zubair** (Kam Leang)
Department of Mechanical Engineering
Design and Implementation of a Shrouded Rotor for Increasing Quadcopter Performance
- Poster 115: **Mary Stoddard** (Akiko Kamimura)
Department of Sociology
Motivations and Outcomes of Volunteers at a Non-student-run Free Clinic
- Poster 116: **Hunter Howe** (Peregrine Schwartz-Shea)
Department of Political Science
Not a Glass Ceiling, a Glass Institution
- Poster 117: **Austin Russon** (Hong-Hua Mu)
Department of Internal Medicine
The Use of Mycoplasma Arthritis in Animal Models: Monitoring Cytokine Expression of Induced Arthritis

Poster 118: **Lily Wetterlin** (Brenda Bowen)

Department of Geology & Geophysics

*Micro-scale textures and composition in the sediments on the Bonneville
Salt Flat*

POSTER SESSION II

10:45 – 12:15pm

MAIN BALLROOM

- Poster 1: **Kevin Voll** (Alan Light)
Department of Anesthesiology
Purine Effects on Mouse Dorsal Root Ganglion Neurons
- Poster 1: **Jay Jensen** (Alan Light)
Department of Anesthesiology
Purine Effects on Mouse Dorsal Root Ganglion Neurons
- Poster 2: **Ann Rowley** (Kai Kuck)
Department of Anesthesiology
Designing and Developing a Capnograph for Use in Developing Countries and Low-Resource Areas
- Poster 3: **Savanna Agardy** (Brian Coddling)
Department of Anthropology
Flow of the people: How obsidian artifacts reveal patterns of mobility in the Prearchaic Great Basin
- Poster 4: **Olivia Juarez** (Brian Coddling)
Department of Anthropology
From Food Waste to Hunger Relief: A Novel Approach to Food Recovery
- Poster 5: **Joanna Lam** (Adrian Bell)
Department of Anthropology
Perceptions of Personality: Sojourners and Immigrants Between China and America
- Poster 6: **Alina Paegle** (Adrian Bell)
Department of Anthropology
Activation and Construction of Ethnic Markers in an Immigrant Community
- Poster 7: **Dori Peers** (Brian Coddling)
Department of Anthropology
Australian Aboriginal Ethno linguistics

- Poster 8: **Tuscan Thompson** (Steve Alam)
Department of Biochemistry
Interactions between PPxY Motifs in AMOT and WW Domains in NEDD4L Function in Viral Budding
- Poster 9: **Ana Chacin** (Robert Hitchcock)
Department of Bioengineering
Designing, Building, and Testing a Next Generation Intra-Abdominal Pressure Sensor Calibration Instrument
- Poster 10: **Steven Deng** (Alexey Zaitsev)
Department of Bioengineering
Mitochondrial versus cellular permeability post heart attack - What is the Chicken and what is the Egg?
- Poster 11: **Caleb Parry** (Susan Bock)
Department of Bioengineering
Purification and Characterization of a Virus-Like-Particle Vaccine from Insect Pupae
- Poster 12: **Jimena Schultz** (Hamid Ghandehari)
Department of Bioengineering
Synthesis of a tumor extracellular matrix-responsive docetaxel-eluting hydrogel
- Poster 13: **Ivy Christofferson** (Sophie Caron)
Department of Biology
*Elucidating the neuronal pathway underlying gustatory associative learning in *Drosophila melanogaster**
- Poster 14: **Gabrielle Ghabash** (Thomas Kursar)
Department of Biology
*Primary Metabolites In Plant Defenses: Overexpression Of L-Tyrosine In The Tropical Tree Genus *Inga* (Fabaceae)*
- Poster 15: **Ping Guo** (Nitin Phadnis)
Department of Biology
*Over-expression of gene *gzf* may cause inviability in non-hybrid offspring in *D. melanogaster**

- Poster 16: **Gabrielle Hoyer** (Erik Jorgensen)
Department of Biology
Calcium Control of Vesicle Fusion at Neuromuscular Junctions
- Poster 17: **John Jackson** (Graham Goodman)
Department of Biology
Do Birds that Preen More also Allopreen More?
- Poster 18: **Stephanie VanBeuge** (Nitin Phadnis)
Department of Biology
Fine mapping of the genetic architecture contributing to speciation between fruit fly subspecies
- Poster 19: **Shalauna Thompson** (Kevin Whitty)
Department of Chemical Engineering
Investigation of the Carbon Capture Ability of Solid Sorbents Using Thermogravimetric Analysis
- Poster 20: **Jacob Tuttle** (Kody Powell)
Department of Chemical Engineering
High Temperature Thermal Energy Storage of Concentrated Solar Power for Power Generation
- Poster 21: **Cameron Owen** (Peter Armentrout)
Department of Chemistry
Structures of the Dehydrogenation Products of Methane Activation by 5d Transition Metal Cations Revisited: Deuterium Labeling
- Poster 22: **Guillermina Loyola Pelaez** (Andrea Garfunkel)
Department of City & Metropolitan Planning
Ecological Literacy and Future Teachers: A Study of State Universities in Utah
- Poster 23: **Cameron Reinhart** (Tatjana Jevremovic)
Department of Civil & Environmental Engineering
Radiation Shielding Ability of La-Ce:Nb Metallic Glass Formations

- Poster 24: **Monica Scott** (Danielle Endres)
Department of Communication
How Nuclear Science Professional Society Presidents Frame Nuclear Energy
- Poster 25: **Adam Whalen** (Sara Yeo)
Department of Communication
Attitudes Toward the Utes Nickname & Logo
- Poster 26: **Danielle Ensign** (Suresh Venkatasubramanian)
Department of Computing
Performativity in Algorithm Fairness
- Poster 27: **Maria David** (Eric Sjöberg)
Department of Economics
The effect of physician altruism on patient health outcomes
- Poster 28: **Devan Parkinson** (Thomas Maloney)
Department of Economics
The Inequality of Public Spending on Education and Income Inequality
- Poster 29: **Chandler Stepan** (Thomas Maloney)
Department of Economics
Differences in Income Mobility in Salt Lake and the United States
- Poster 30: **Carmen Flores Gonzalez** (Maria Franquiz)
Department of Education, Culture & Society
Multicultural Literacy in the 21st Century Classrooms
- Poster 31: **Nickolas Lee** (Eric Poitras)
Department of Educational Psychology
Design of a visual procedural modeling language processing application for clearly communicating precise knowledge
- Poster 32: **Vai Suliafu** (Eric Poitras)
Department of Educational Psychology
Using Mouse Cursor Coordinates to Predict the Learner's Usefulness Rankings of Online Resources with an Intelligent Web Browser

- Poster 33: **Nathan Curtis** (Joel Harley)
Department of Electrical & Computer Engineering
Ultrasonic Characterization and Inspection of 3D Printed Metals
- Poster 33: **Carl Herriott** (Joel Harley)
Department of Electrical & Computer Engineering
Ultrasonic Characterization and Inspection of 3D Printed Metals
- Poster 34: **John Robe** (Jon Davies)
Department of Electrical & Computer Engineering
The Design and Implementation of Autonomous Robotic Systems using ROS
- Poster 35: **Curtis Pierce** (Robert Dubil)
Department of Finance
Technology Adoption as a Predictive Measure of Financial Performance
- Poster 36: **Travis Warner** (Scott Schaefer)
Department of Finance
Using term spreads to predict recessions: a comparison
- Poster 37: **Anna Albertsen** (Jennifer Follstad Shah)
Department of Geography
Possible Benefits Of Ectomycorrhizal Infection Of Conifer Seedlings At Alta Ski Area
- Poster 38: **Amber Henshaw** (Kathleen Nicoll)
Department of Geography
Public Perceptions of Air Pollution and Health Risks: A Community Survey
- Poster 39: **Shelby Sly** (Andrea Brunelle)
Department of Geography
Reconstructing a Late Holocene Disturbance Record in Range Creek Canyon, Utah
- Poster 40: **Daniel Nielsen** (Mitch Power)
Department of Geography
Anomalous Populations of Ponderosa Pine on the Wasatch Front

- Poster 41: **Lucas Bohne** (Paul Brooks)
Department of Geology & Geophysics
Quantifying surface water chemistry variations in canyons of the Salt Lake City watershed
- Poster 42: **Alexander Kim** (Anthea Letsou)
Department of Human Genetics
Dpp Signal Regulation through O-linked Glycosylation
- Poster 43: **Erin Ritchie** (David Grunwald)
Department of Human Genetics
The Contribution of Ryanodine Receptors to Left/Right Asymmetry Patterning
- Poster 44: **Alexandra Mortenson** (Debernieri Torrey)
Department of Languages & Literature
No Longer A Guest: Christianity's Role In Hwang SöK-YöNg's Metaphorical Exorcism
- Poster 45: **Samantha Cooper** (Carolyn Bliss)
LEAP
Community Involvement
- Poster 46: **Enoabasi Etokidem** (Carolyn Bliss)
LEAP
The Reach for your Dreams Program at Mountain View Elementary School
- Poster 47: **Alexander Chang** (Carolyn Bliss)
LEAP
Bryant And Beyond Scholarship Eligibility
- Poster 47: **Philip Ngo** (Carolyn Bliss)
LEAP
Bryant And Beyond Scholarship Eligibility
- Poster 47: **Peter Ahorukomeye** (Carolyn Bliss)
LEAP
Bryant And Beyond Scholarship Eligibility

- Poster 48: **Minh Nguyen** (Carolyn Bliss)
 LEAP
Tutoring for Bryant Scholar
- Poster 49: **Stephanie Yu** (Elizabeth Tenney)
 Department of Management
The Belief that Optimism Improves Performance (China)
- Poster 50: **Sierra Anderson** (Tony Passey)
 Department of Marketing
How Implementing Search Engine Optimization Can Increase Digital Presence
- Poster 51: **Emily Timmins** (Michael Scarpulla)
 Department of Materials Science & Engineering
Laser annealing of Te inclusions in bulk CdTe single crystal detectors
- Poster 52: **Dietrich Geisler** (Aaron Bertram)
 Department of Mathematics
Construction of the Simple Lie Algebras from Associated Dynkin Diagrams
- Poster 53: **Carlisle Fauver** (Steven Naleway)
 Department of Mechanical Engineering
Complex Structuring of Porous Ceramic Materials by Freeze Casting under Magnetic Fields
- Poster 54: **Alec Mittelstadt** (Krista Carlson)
 Department of Metallurgical Engineering
Development and optimization of titanium dioxide nanotube-based arrays for use in sustainable technologies
- Poster 55: **Ashley Timmerman** (Krista Carlson)
 Department of Metallurgical Engineering
Interactions of Zn-plated TiO₂ Nanotubes with Ibuprofen for Applications in Point-of-Use Electrochemical Detection

- Poster 56: **Andrea Evans** (Alexa Doig)
Department of Nursing
Assessment of Patient Knowledge and Awareness of Hypertension at the Midvale and Salt Lake Orthopaedic Clinics
- Poster 57: **Karlee Chipman** (Sihem Boudina)
Department of Nutrition and Integrative Physiology
Studying the role of retinol transporter STRA6L in regulation of immune gene expression in lymphoid and non-lymphoid tissues: relevance in development of metabolic disease
- Poster 58: **Lilly Kanishka** (Sihem Boudina)
Department of Nutrition and Integrative Physiology
Using a mouse model to study the role of immune system in Type 2 Diabetes: deletion of retinol transporter in dendritic cells protects mice from obesity induced glucose intolerance and insulin insensitivity
- Poster 59: **Reghan Boelter** (Rodney Stewart)
Department of Oncological Sciences
Does TRAP1 Accelerate MYCN-Driven Neuroblastoma in Zebrafish
- Poster 60: **Sarmishta Diraviam Kannan** (Kevin Jones)
Department of Oncological Sciences
The Role of Lysosomes and Autophagy in Alveolar Soft Parts Sarcoma, Clear Cell Sarcoma and Synovial Sarcoma
- Poster 61: **Curtis Stone** (Craig Gygi)
Department of Operations & Information Science
Six Sigma and The Toyota Way
- Poster 62: **Taylor Webster** (Mary Elizabeth Hartnett)
Department of Ophthalmology & Visual Sciences
Ocular Injuries and Protective Eyewear use in Sports
- Poster 63: **Matthew Driscoll** (Andrew Anderson)
Department of Orthopaedics
Quantification of Healthy Tibiotalar and Subtalar Joint Angles during Multiple Activities

- Poster 64: **Carol Castaneda** (Mary Burbank)
Department of Urban Institute for Teacher Education
Integrating Social Justice in a Spanish High School Classroom to Increase Motivation and Proficiency in Learning Spanish as a Second/World Language
- Poster 65: **Jennifer Nielsen** (Adrienne Cachelin)
Department of Environmental & Sustainability
The Impact of Real Food Labeling on Student Food Choice Behavior and Attitudes
- Poster 66: **Jonathon Reynolds** (Ty Dickerson)
Department of Pediatrics
Efficacy of Rapid Diagnostic Tests for Malaria in Children of Rural Ghana
- Poster 67: **Zachary Barber** (Hamid Ghandehari)
Department of Pharmaceutics & Pharmaceutical Chemistry
Hollow Mesoporous Silica Nanorattles For Controlled Drug Delivery
- Poster 68: **Nikol Yonemura** (Micah Drummond)
Department of Physical Therapy
Role of skeletal muscle macrophages in inactivity-induced insulin resistance
- Poster 69: **Timothy Allen** (Jordan Gerton)
Department of Physics & Astronomy
Extracting Wavelength Data from a Modified Point Spread Function: A Collection of Monte Carlo Simulations
- Poster 71: **Yae Ji Kim** (Ansuk Jeong)
Department of Psychology
Depressive disorder and personality after mastectomy
- Poster 72: **Mark Lavelle** (Matthew Euler)
Department of Psychology
EEG Time-Frequency Dynamics Associated with Eye Blink Suppression

- Poster 73: **Piper Meisinger** (Sarah Creem-Regehr)
Department of Psychology
How Teaching Egocentric and Allocentric Learning Strategies Affect Spatial Learning
- Poster 74: **Isabel Reback** (Trafton Drew)
Department of Psychology
Low Target Prevalence Exacerbates Problems with Computer-Aided Detection (CAD) During Visual Search
- Poster 75: **Katharine Roth** (Sheila Crowell)
Department of Psychology
Mother's Mental Health And Emotional Validation Towards Their Daughters
- Poster 76: **Ashma Shrestha** (Elisabeth Conradt)
Department of Psychology
A biobehavioral Approach to Measuring Emotion Dysregulation in Pregnancy
- Poster 77: **Dominique Pablito** (Vidya Bhaskara)
Department of Radiation Oncology
Slot-Blot Analysis to Detect Nascent Chromatin bound proteins
- Poster 78: **Kai Sin** (Akiko Kamimura)
Department of Sociology
Lifestyle issues related to cardiovascular disease among refugees in Utah
- Poster 79: **Calli Bennett** (Megan Reynolds)
Department of Sociology
Transgenderism and healthcare: Barriers at the provider level
- Poster 80: **Maggie Hope** (Heather Melton)
Department of Sociology
The Problem with Unsubmitted Sexual Assault kits
- Poster 81: **Katie Houser** (Claudia Geist)
Department of Sociology
LGBT Involvement in Federal Health Policy and Program Development

- Poster 82: **Siosaia Langi** (Theresa Martinez)
Department of Sociology
Holistic Learning and Youth Empowerment
- Poster 83: **Whitney Russell** (Charlie Hicks-Little)
Department of Health Promotion & Education
Quantification of Movement Analysis and Functional Testing in Dancers
- Poster 84: **Kira Norcross** (Melissa Schaefer)
Department of Anthropology
An explorative study of Lemur fitness in relation to litter size Or "A Lack Thereof"
- Poster 85: **Amber Barron** (Jeff Bates)
Department of Materials Science & Engineering
Natural Materials for Biodegradable Feminine Hygiene Products

POSTER SESSION III

1:00 – 2:30pm

MAIN BALLROOM

- Poster 1: **James Perkins** (Karen Kramer)
Department of Anthropology
Risk Orientation and Individual Variation
- Poster 2: **Sean Heslin** (Thomas Reichler)
Department of Atmospheric Sciences
Low-Frequency Variations of Extreme Stratospheric Circulation Events
- Poster 3: **Arielle Hassett** (Benjamin Ellis)
Department of Bioengineering
Finite Element Analysis of Stress in the Pars Interarticularis after Laminectomy
- Poster 4: **Elizabeth Pumford** (Vladimir Hlady)
Department of Bioengineering
Platelet Rolling and Adhesion Following Upstream Activation
- Poster 5: **Granger Cocke** (Denise Dearing)
Department of Biology
CYP2B Active Site Diversity in Neotoma albigula and Neotoma stephensi
- Poster 6: **Kacey Davis** (Martin Horvath)
Department of Biology
Predatory Marine Snail Toxins: a Study of Protein Fold and Function
- Poster 7: **Vincent Fu** (Martin Horvath)
Department of Biology
Laminins As A Potential Enhancer Of Beta Islet Of Langerhans Proliferation And Subsequent Gene Expression
- Poster 8: **Alex Geertsen** (J. Michael McIntosh)
Department of Biology
Identifying $\alpha 9$ -Nicotinic Acetylcholine Receptors in Human Mammary Gland Epithelia

- Poster 9: **Anthony Mills** (Lissy Coley)
 Department of Biology
In-Silico Library Generation and MS/MS Fragmentation for Secondary Metabolite Identification in Inga
- Poster 10: **Lane Mulvey** (Nitin Phadnis)
 Department of Biology
*Study of the Genetic Basis of Speciation Using Two Subspecies of *Drosophila pseudoobscura**
- Poster 11: **Yajaira Peralta** (Wayne Potts)
 Department of Biology
Paternal social status influences offspring body mass: A role for epigenetics?
- Poster 12: **Josue Seoane** (Nitin Phadnis)
 Department of Biology
*Characterization of the Gene Overdrive in *Drosophila melanogaster**
- Poster 13: **Sydney Stephens** (Denise Dearing)
 Department of Biology
*Changing diets and chiseling away dogmas regarding saltbush specialization in *Dipodomys microps**
- Poster 15: **Anastasia Borodai** (Thomas Richmond)
 Department of Chemistry
Faraday at Home: Continuing Faraday from the "U" to the youth
- Poster 16: **Dietrich Geisler** (Michael Grünwald)
 Department of Chemistry
Deep Neural Network Time Extension of DFT-Modeled Thermodynamic Systems
- Poster 17: **Evan Hurlow** (Jon Rainier)
 Department of Chemistry
The Diversification of an Aggregate Busting Quinone-Amino Acid Conjugate

- Poster 18: **Chance Miller** (Valeria Molinero)
Department of Chemistry
Exploring the Relationship Between Activity Coefficients and Water Uptake of Tetraalkyl Ammonium Halide - Polyphenylene Oxide Structured Anion-Exchange Membranes for Alkaline Fuel Cells Utilizing Coarse-Grained Simulations
- Poster 19: **Weston Wood** (Leonard Hawes)
Department of Communication
Consciousness is a Conversation: Towards an Eco-Dialogical Theory of Communication
- Poster 20: **Dahee Yun** (Paul Rose)
Department of Communication
Project Longbridge
- Poster 21: **Breanna Gabaldon** (Stacy Manwaring)
Department of Communication Sciences & Disorders
Maternal Gesture Use In Toddlers With Language Delays And Typical Development
- Poster 22: **Elise Mori** (Stacy Manwaring)
Department of Communication Sciences & Disorders
Analysis of Spontaneous Language in Children with Autism Spectrum Disorder Compared to Typical Development
- Poster 23: **Elizabeth Utchel** (Stacy Manwaring)
Department of Communication Sciences & Disorders
Exploring Play in Toddlers with Language Delay and Typical Development
- Poster 24: **Conan Zhang** (Robert Kessler)
Department of Computing
Fundraising Game Development through Crowdfunding
- Poster 25: **Rajeev Sahay** (Joel Harley)
Department of Electrical & Computer Engineering
Effects of Environmental Factors on Ultrasonic Guided Wave Technology

- Poster 25: **Yisong Zhang** (Joel Harley)
Department of Electrical & Computer Engineering
Effects of Environmental Factors on Ultrasonic Guided Wave Technology
- Poster 26: **Rachael Palmer** (Rajesh Menon)
Department of Electrical & Computer Engineering
Lensless Computational Imaging
- Poster 27: **Anna Birtulescu** (Cathleen Zick)
Department of Family & Consumer Studies
Healthy Eating in 1936 and its Associated Factors
- Poster 28: **Georgie Corkery** (Jennifer Watt)
Department of Geography
Investigating Historic Mountain Pine Beetle Outbreaks in the Sawtooth Mountains, Idaho, USA
- Poster 29: **Marianne Newell** (Andrea Brunelle)
Department of Geography
Study of Utah's Climate History by Analysis of Lake Cores Collected from Lake Bonneville Sites
- Poster 30: **Sarah Wilmot** (Andrea Brunelle)
Department of Geography
Fire ecology at Simpson Spring Snake Pit
- Poster 32: **Taylor Almond** (Bruce Dain)
Department of History
Sisters in Zion: Mormon Energy Healers in Utah
- Poster 33: **Daniel McClellan** (Ravi Ranjan)
Department of Internal Medicine
Improving Reproducibility of Scar Tissue Maps For Repeat Ablation Scans
- Poster 34: **Sarmishta Diraviam Kannan** (Carolyn Bliss)
LEAP
Creating Awareness on Transgender Health

- Poster 34: **Ludovica Farese** (Carolyn Bliss)
 LEAP
Creating transgender Health awareness
- Poster 35: **Annwin Chen** (Carolyn Bliss)
 LEAP
Connect2Health: Connecting Patients to their Community
- Poster 36: **Brenda Espitia** (Carolyn Bliss)
 LEAP
Atrial Fibrillation within obese patients
- Poster 38: **Jenica Jessen** (Abby Kaplan)
 Department of Linguistics
Musical Evidence for Syllabification Patterns of Highly Moraic Structures in English
- Poster 38: **Sara Ng** (Abby Kaplan)
 Department of Linguistics
Musical Evidence for Syllabification Patterns of Highly Moraic Structures in English
- Poster 38: **Joselyn Rodriguez** (Abby Kaplan)
 Department of Linguistics
Musical Evidence for Syllabification Patterns in English
- Poster 40: **Kenneth Zheng** (Tom Alberts)
 Department of Mathematics
Dyck Paths and Random Trees
- Poster 41: **Christopher Anjewierden** (Stephen Mascaro)
 Department of Mechanical Engineering
Anatomically Correct Modeling of the Human Hand
- Poster 42: **Anup Khadka** (Eric Pardyjak)
 Department of Mechanical Engineering
Understanding the Interaction of Microclimate and Building Energy Use through a Distributed Sensor Network

- Poster 43: **John Lillquist** (Andrew Merryweather)
Department of Mechanical Engineering
Speed Controlled Braking System for Safe Recreational Rehabilitation
- Poster 44: **Naveen Rathi** (Bruce Gale)
Department of Mechanical Engineering
Microfluidic Sperm Processing as a Potential Treatment for Male Infertility
- Poster 45: **Samantha Tan** (Steven Naleway)
Department of Mechanical Engineering
3D printed templating, mechanical testing, and computational analysis of porous ceramic structures
- Poster 46: **Amelia St Clair** (Amy Barrios)
Department of Medicinal Chemistry
Investigation of Caspase 1 Inhibition via Au(I) Phosphines
- Poster 47: **Michael Guo** (Matt Wachowiak)
Department of Neurobiology & Anatomy
Facilitating the Mapping of the Olfactory Bulb
- Poster 47: **Mia Wipfel** (Matt Wachowiak)
Department of Neurobiology & Anatomy
Facilitating the Mapping of the Olfactory Bulb
- Poster 48: **Derek Woodruff** (Megan Williams)
Department of Neurobiology & Anatomy
Uncovering synaptic defects resulting from loss of the intellectual disability and autism-associated gene Kirrel3
- Poster 49: **Emmie Msiska** (Linda Edelman)
Department of Nursing
Building Resilience in Long Term Care Nursing
- Poster 50: **Matthew Harmon** (J. David Symons)
Department of Nutrition and Integrative Physiology
Nasal Administration of Diesel Exhaust Particles Does Not Evoke Dysfunction or Initiate Autophagy in Murine Femoral Arteries

- Poster 51: **Kiana Wong** (Anandh Babu Pon Velayutham)
 Department of Nutrition and Integrative Physiology
Strawberry Supplementation Improves Vascular Complications in Diabetes by Activating eNOS/NO/cGMP Signaling
- Poster 52: **Jacob Wiscomb** (Margit Amsbury)
 Department of Obstetrics & Gynecology
Development of a Chemoresistant Murine Ovarian Cancer
- Poster 53: **Garrett Christensen** (Adam Cohen)
 Department of Oncological Sciences
Retrospective Analysis of Treatment Regimens on Oligodendroglioma Patient Outcomes
- Poster 54: **Abbie Ireland** (Trudy Oliver)
 Department of Oncological Sciences
Differential Gene Expression and Therapeutic Response of Distinct Subtypes of Small Cell Lung Cancer
- Poster 55: **Jameieka Price** (Douglas Mackay)
 Department of Oncological Sciences
Probing the Function of NUP 153 in NUP 50 Interaction in DNA Damage Response
- Poster 57: **Samuel Colby** (Andrew Anderson)
 Department of Orthopaedics
Finite Element Analysis of Cartilage Stresses Across across a Variety of Activities of Daily Living Using Kinematics from Dual Fluoroscopy
- Poster 58: **Morgan Izykowski** (Heath Henninger)
 Department of Orthopaedics
Forces in the Residual Humerus of Amputees During Activities of Daily Living
- Poster 59: **Karl Ramirez** (Candace Chow)
 Department of Other
A qualitative investigation of physician identities and patient interactions

- Poster 59: **Shiya Zeng** (Candace Chow)
Center for Clinical and Translational Science
A qualitative investigation of physician identities and patient interactions
- Poster 60: **Allan Anderson** (David Derezotes)
Department of Social Work
Educating future peacemakers
- Poster 61: **Reuben Ryan Cano** (Dean Tantin)
Department of Pathology
Transcription Factor Oct1 is Ubiquitinated by BRCA1 to Regulate Metabolism
- Poster 62: **Alexandra Heitkamp** (Sherwood Casjens)
Department of Pathology
Study of bacteriophage P22 superinfection exclusion protein SieA
- Poster 63: **Raymond Reynolds** (Jessica Brown)
Department of Pathology
Cryptococcus neoformans pathogenesis
- Poster 64: **Virginia Young** (Catherine Sherwin)
Department of Pediatrics
Antidepressant Comedication Use During Pregnancy
- Poster 65: **Mai Doan** (Jindrich Kopecek)
Department of Pharmaceutics & Pharmaceutical Chemistry
Developing HPMA Copolymer-Affibody Conjugates for Targeted Drug Delivery Applications
- Poster 66: **Sarah Smith** (Karen Wilcox)
Department of Pharmacology & Toxicology
Transfection of Novel Genes via Electroporation to Understand Mitochondrial Function in Astrocytes
- Poster 67: **Preston Brunner** (Micah Drummond)
Department of Physical Therapy
Effect of Neuromuscular Electrical Stimulation on mTORC1 Signaling in Skeletal Muscle of Older Adults on Bed Rest

- Poster 68: **Kirsten Gorski** (Lee Dibble)
Department of Physical Therapy
Does the Dosage of Practice in Standard Balance Rehabilitation Maximize Retention and Transfer of Balance Skill?
- Poster 69: **Devan Anderson** (Inese Ivans)
Department of Physics & Astronomy
Planet Formation's Imprint on the Host Star's Spectrum
- Poster 70: **Asma Rokhaneevna** (Clayton Williams)
Department of Physics & Astronomy
Preparation of Single Mode Optical Fibers for Application in 3D Interferometry
- Poster 71: **Tingshuan Wu** (David Kieda)
Department of Physics & Astronomy
Characterizing the Matched-Run Method for analyzing images of Extended γ -Ray Sources using VERTIAS
- Poster 72: **Zinaida Bougri** (Tabitha Benney)
Department of Political Science
Refugee Governance: Finding Solutions Through Policy Reform
- Poster 74: **Arcadia Payne** (Marjorie Castle)
Department of Political Science
Preventing Crisis: Identifying and Understanding Causes of Genocide in Fragile States
- Poster 75: **Taylor Adams** (David Sanbonmatsu)
Department of Psychology
Social Perception Study
- Poster 76: **William Hynes** (Monisha Pasupathi)
Department of Psychology
Audience Tailoring: Implications for Narrative Identity Formation
- Poster 77: **Yu Kyoung Kang** (Ansuik Jeong)
Department of Psychology
Well-being of People with Myasthenia Gravis (MG)

- Poster 78: **Aashild Renee Nilssen** (Michael Himle)
Department of Psychology
Assessment of Personal Relationships, Loneliness and Quality of Life Among Adults with ASD
- Poster 79: **Erin O'Connor** (Yana Suchy)
Department of Psychology
The Use of Speed-Accuracy Trade-Off in the Delis-Kaplan Executive Function System
- Poster 80: **Mitch Whitfield** (David Strayer)
Department of Psychology
Sensitivity of the Visual Detection Response Task: Interacting with a Touch Screen in a Driving Simulator
- Poster 81: **Emily Dennis** (Srividya Bhaskara)
Department of Radiation Oncology
Genome Stability and Cancer
- Poster 82: **Kyler Hodgson** (Ed DiBella)
Department of Radiology
Image-based prognosis of stroke using NODDI model
- Poster 83: **Mu Pye** (Akiko Kamimura)
Department of Sociology
Health, health literacy and healthcare utilization among Muslim women in Utah
- Poster 84: **Hannah Gorski** (Akiko Kamimura)
Department of Sociology
Increasing Volunteer Retention at Free Health Clinics
- Poster 85: **Lily Robb** (Rebecca Utz)
Department of Sociology
Disability Reform in the United States: From Institutionalization to Integration
- Poster 86: **Nicholas Iacopino** (Keunhan Park)
Department of Mechanical Engineering
Development of Large Scale Educational Atomic Force Microscopy

- Poster 87: **Taelor Johnson** (Albert Park)
 Department of Surgery
Hearing Loss Induction in Nrf2 Knockout Mice Via Murine Cytomegalovirus Infection
- Poster 88: **Tae Hoon Kim** (Keunhan (Kay) Park)
 Department of Mechanical Engineering
Experimental Investigation of Near-Field Radiative Heat Transfer
- Poster 89-90: **Madeline Rencher** (Anne Kirby)
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