2018 Undergraduate Research Symposium

WEDNESDAY, APRIL 11, 2018
9:00AM - 2:30PM
OLPIN UNION BLDG.
UNIVERSITY OF UTAH
2018 UNDERGRADUATE RESEARCH SYMPOSIUM
Wednesday, April 11, 2018
9:00am – 2:30pm
Olpin Union
University of Utah

We are grateful for the generous support of:

[Logos]

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!

The Office of Undergraduate Research is grateful for generous support from:

Francis Family Foundation
Sharon and Karl Schatten
Lawrence T. and Janet T. Dee Foundation
Chevron Foundation
University of Utah Parent Fund
**2018 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, Parlor B, Collegiate Room, West Ballroom, Room 311, 312, 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, West Ballroom, East Ballroom, Room 311, 312, 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, Parlor B, Collegiate Room, West Ballroom, East Ballroom, Room 311, 312, 319)
2018 UNDERGRADUATE RESEARCH SYMPOSIUM
SCHEDULE OF PRESENTATIONS

ORAL SESSION I
9:00 – 10:30am

PARLOR A

Moderator: Kim Hackford Peer (Gender Studies)

9:00am  Kylie Madsen (Julie Jeon)
Department of Communication Sciences and Disorders
Speech perception ability in persons with diabetes

9:20am  Victoria Brown (Bill Oakley)
Department of Marketing
ADTHING: A Student Experience

9:40am  Chaise Edebiri (Noel Voltz)
Department of History
Storm at Southern: Hurricane Katrina’s Impact on Degree-Completion Rates at Southern University at New Orleans

10:00am  Madi Limansky (Kim Hackford-Peer)
Department of Gender Studies
How do fashion and identity intersect?

PARLOR B

Moderator: Jim Curry (Political Science)

9:00am  Katherine Leibold (Mark Button)
Department of Political Science
The Electability of Atheists in the United States
9:20am  Connor Nelson (James Curry)  
Department of Political Science  
The Expansion and Management of Executive Power and the Role of Executive Orders in the United States, 2001-2017

9:40am  Emad Jabini (Korkut Erturk)  
Department of Economics  
An examination of switchover costs and their economic ramifications in the pharmaceutical, information technology, and food manufacturing industries.

10:00am  Nikila Venugopal (Steven Johnston)  
Department of Political Science  
Baldwin in Conversation: The Potential for Love in Anti-Racist Projects

COLLEGIATE ROOM

Moderator: Maureen Mathison (Writing and Rhetoric Studies)

9:00am  Dalton Edwards (Alf Seegert)  
Department of English  
Grizzled Man: Blackwood, Herzog, and Nonhuman Agency in Eco-horror

9:20am  Ali DeGrauw (Maureen Mathison)  
Department of Writing & Rhetoric Studies  
Thinking About Science: Examining How an Educated Public Conceptualizes Science

9:40am  Jon Kim (Michael Chikinda)  
Department of School of Music  
Compositional Applications of the IC 3.5 Cycle
WEST BALLROOM

Moderator: Taylor Sparks (Materials Science and Engineering)

9:00am  Preston Williams (Feng Zhang)
Department of Finance
Politics, Twitter And The Stock Market: The Effects Of A Trump
Presidency On Market Efficiency

9:20am  Logan Kiefer (Taylor Sparks)
Department of Materials Science and Engineering
Temperature effects on electrochromic lenses for use in manually-
controllable, variable-tint ski goggles

9:40am  Simon Redman (Kobus van der Merwe)
Department of School of Computing
Critical Reroute

ROOM 311

Moderator: Jenny Andrus (Writing and Rhetoric Studies)

9:00am  Madeline Lehman (Paul Larsen)
Department of Film & Media Arts
Claudette’s

9:20am  Casey Koldewyn (Jenny Andrus)
Department of Writing & Rhetoric Studies
Disabling Sci-Fi

9:40am  Megan Hulse (Glen Feighery)
Department of Communication
Investigative Reporting and the Arts
ROOM 312

Moderator: Jennifer Watt (Geography)

9:00am  Daniel Zhu (Bruce Gale)
Department of Bioengineering
Experimental Study Of The Effect Of Fk506 Embedded Plc Wrap
On Nerve Regeneration

9:20am  Kade Lansford (Bruce Gale)
Department of Mechanical Engineering
Microfluidic Flow Characterization

9:40am  Jane Saviers-Steiger (Robert Hitchcock)
Department of Bioengineering
Developing Housing for a Flexible Pressure Sensor

10:00am Zeke Peterson (Kerry Kelly)
Department of Chemical Engineering
Calibration of Low-Cost Ozone Detectors to Measure a Key-
Indicator of Summertime Air Quality in the Salt Lake Valley

ROOM 319

Moderator: Kate Job (Pediatrics)

9:00am  Ivy Christofferson (Ivy Christofferson)
Department of Biology
The connectivity mechanisms underlying multisensory integration
in an associative brain center

9:20am  Joseph Blanton (Shanti Deemyad)
Department of Physics & Astronomy
AC Magnetic Susceptibility of Sub-milimeter Superconductor
Samples at Extreme Conditions

9:40am  Deric Session (Vikram Deshpande)
Department of Physics & Astronomy
Mechanical Resonators Based on Graphene Heterostructures
10:00am  **Cole Takasugi** (Daniel Wik)
Department of Physics & Astronomy
*Bench Marking of the Active Shielding Particle Pusher with Theoretical Models*
PARLOR A

Moderator: Daniel Levin (Political Science)

10:45am  Kyra Soboleski (Jim Agutter)
Department of Multi-Disciplinary Design
Overcrowding in Zion National Park

11:05am  Athena Ho (Cord Bowen)
Department of Multi-Disciplinary Design
Redesigning Curriculum in Housing

11:25am  Kira Wachter (Bill Oakley)
Department of Marketing
Career Immersion Prior To Graduation: An Analysis Of The Efficacy Of Student Marketing Agencies

11:45am  Kris Glad (Susie Porter)
Department of Gender Studies
How We Got To 'Queer': A Sociohistorical Examination of Language Development

PARLOR B

Moderator: Joerg Votteler (Biochemistry)

10:45am  Brian Cottle (Robert Hitchcock)
Department of Bioengineering
Video Synchronization to Better Understand Intra-Abdominal Pressure in Women
ORAL SESSION | 10:45 – 12:15pm

11:05am  Eric Bellan (Owen Kingstedt)
Department of Mechanical Engineering
*An Experimental Technique for Magnetic-field Actuated Intermediate Strain-rate Deformation of Soft Polymers and Biomaterials*

11:25am  Shardul Kamat (Wenda Tan)
Department of Mechanical Engineering
*Polymer based additive manufacturing of NiTiNol*

11:45am  Trevor Teerlink (Bruce Gale)
Department of Mechanical Engineering
*Integrated microfluidic device for semen preparation*

COLLEGIATE ROOM

Moderator: Dipayan Chaudhuri (Internal Medicine)

10:45am  Griffin Durupt (Simon Fisher)
Department of Internal Medicine
*Increased insulin action in the brain regulates counterregulatory response to hypoglycemia in diabetic rats*

11:05am  Jerry Bounsanga (Man Hung)
Department of Orthopaedics
*Genome mapping of the H. borinquense*

11:25am  LaVar Edwards (Aaron Secrest)
Department of Dermatology
*Predilection Of Keratinocyte Carcinoma Skin Cancer By Age And Sex*

11:45am  Chris Stringham (Wesley Sundquist)
Department of Biochemistry
*Designed two-component protein nanocages induce the formation of extracellular vesicles*
WEST BALLROOM

Moderator: Doug Mackay (Oncological Sciences)

10:45am  Lauryn Angell (Diego Fernandez)  
Department of Geology and Geophysics  
Uranium Isotopes in Environmental Samples

11:05am  Sarah Brown (Carol Lim)  
Department of Pharmaceutics & Pharmaceutical Chemistry  
p53 Induces Apoptosis at the Mitochondria of Ovarian Cancer Cells

11:25am  Samuel Hatch (Shawn Owen)  
Department of Pharmaceutics & Pharmaceutical Chemistry  
One Tag to Rule Them All: Split-Luciferase Affinity Tag with Multifaceted Utility in the Production and Interrogation of Purified Proteins

11:45am  Madison Abele (Jason Castillo)  
Department of Social Work  
Low Income Pregnant Women’s Quality of Prenatal Care

EAST BALLROOM (Performance)

Moderator: TBA

10:45am  Rachel Luebbert (Ellen Bromberg)  
Department of School of Dance  
The Female Bildungsroman through Movement and Performance
ROOM 311

Moderator: Stephanie Shiver (Undergraduate Research)

10:45am Christal Hazelton (Lien Fan Shen)
Department of Film & Media Arts
What We Tell Children: Queer Representation in Children’s Animation

11:05am Natasha Eldredge (Natasha Seegert)
Department of Communication
Policies And Procedures In The Communication And Collaboration Of Iep Team Members For Autistic Children

11:25am Glory Stanton (William Smith)
Department of Education, Culture & Society
‘Black Men Matter!’: Understanding the Biopsychosocial Effects of Educated Black Men Living in Predominately White Communities

ROOM 312

Moderator: Trevor Tippetts (Nutrition & Integrative Physiology)

10:45am Hannah Choi (Jon Seger and Sean Lawley)
Department of Mathematics
A Mathematical Approach to Interpreting the Human Experience: a Compilation of Quantitative Stories

11:05am Noble Williamson (Adam Boocher)
Department of Mathematics
The Herzog-Kühl Equations

11:25am Elom Amematsro (Sophie Caron)
Department of Biology
A Tale of Two Odors- The Affects of Biased Randomness in Drosophila Melanogaster
11:45am  Connor Terry Weatherly (Henry White)
Department of Chemistry
Batteries, Fuel Cells, and Nanobubbles: Concerted Electron and Phase Transfer Reactions

ROOM 319

Moderator:  Jennifer Seagrave (LEAP)

10:45am  Tyler Young (Tabitha Benney)
Department of Political Science
A Policy Proposal: Mitigating Externalities and Reaping Benefits of Utah Potash Mining

11:05am  Kiman Kaur (Adrienne Cachelin)
Department of Geography
The Intersections of Gender, Race, and the Environment: What Does Queer Ecology Tell Us About Power and Place in the Ecosystem?

11:25am  Louise Holbrook (Alan Rogers)
Department of Anthropology
Modern-Archaic Mix-In: Estimating Admixture between Modern Humans and Neanderthals

11:45am  Elizabeth Curland (Chris Lippard)
Department of Film & Media Arts
Foreign Cinemas and Documentary
## ORAL SESSION III
### 1:00 – 2:30pm

### PARLOR A

**Moderator:** Becky Larsen (LEAP)

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Department</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00pm</td>
<td>Teddy Anderson (Ben Bromley)</td>
<td>Department of Physics &amp; Astronomy</td>
<td>Examining the Outer Solar System</td>
</tr>
<tr>
<td>1:20pm</td>
<td>Malika Kadirova (Martin Horvath)</td>
<td>Department of Biology</td>
<td>Discovery Of The Lutein Bound Stard3 Complex Using Structural Methods</td>
</tr>
<tr>
<td>1:40pm</td>
<td>Atoosa Samani (Amy sibul)</td>
<td>Department of Biology</td>
<td>Gender Differences and The Learning Outcomes in Chemistry Outreach</td>
</tr>
<tr>
<td>2:00pm</td>
<td>Glenda Palomino Ventura</td>
<td>Department of Education, Culture &amp; Society</td>
<td>Culturally Sustaining Pedagogy: Educators’ Pedagogical Support for Elementary Undocumented/Mixed Status Students</td>
</tr>
</tbody>
</table>

### PARLOR B

**Moderator:** Jim Steenburgh (Mines and Earth Sciences)

<table>
<thead>
<tr>
<th>Time</th>
<th>Speaker</th>
<th>Department</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>1:00pm</td>
<td>Greg Lee (Shannon Odelberg)</td>
<td>Department of Human Genetics</td>
<td>Elucidating the Role of the Arf6 Gene in Acute Myeloid Leukemia</td>
</tr>
</tbody>
</table>
**1:20pm**  
**Mikey Vetter** (Weiquan Zhu)  
Department of Human Genetics  
*Vascular Permeability and Age-Related Macular Degeneration*

**1:40pm**  
**Spencer Fielding** (Jim Steenburgh)  
Department of Atmospheric Sciences  
*Evaluation of Hot Plate Instrumentation in Alpine Environment*

**1:40pm**  
**Zachary Rieck** (Jim Steenburgh)  
Department of Atmospheric Sciences  
*Evaluation of Hot Plate Instrumentation in Alpine Environment*

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**COLLEGIATE ROOM**

**Moderator:** Shawn Owen (Pharmaceutics & Pharmaceutical Chem)

**1:00pm**  
**Zack Harmer** (Dana Carroll)  
Department of Biochemistry  
*Influence of chromatin on cleavage by CRISPR/cas9*

**1:20pm**  
**Ludovica Farese** (Ty Dickerson)  
Department of Pediatrics  
*Global Health Education in U.S. academic medical centers (AMCs)*

**1:40pm**  
**Julie Xu** (Man Hung)  
Department of Orthopaedics  
*Evaluation of Lymph Node Ratio as a Predictor for Breast Cancer Survival*

**2:00pm**  
**Deanne Yugawa** (Charles Murtaugh)  
Department of Human Genetics  
*The rescue and reversion of Pancreatic Ductal Adenocarcinoma through the overexpression of PTF1A in vitro*
WEST BALLROOM

Moderator: Leslie Francis (Philosophy)

1:00pm  William Anderl (Ken Monson)
Department of Mechanical Engineering
Strain Rate Dependency of Collagen Hybridizing Peptide Attachment to Vessel Wall Collagen

1:20pm  Brett Reeder (Pania Newell)
Department of Mechanical Engineering
Numerical Assessment of Additively Manufactures Porous Media

1:40pm  Yiliang Shi (Bei Wang Philips)
Department of School of Computing
Visualization and Topological Analysis of Brain Networks with applications in Autism

2:00pm  Connor Scholes (Leslie Francis)
Department of Law
The Ethics of Uncertainty in Clinical Genetics Testing

EAST BALLROOM

Moderator: Susie Porter (Gender Studies)

1:00pm  Jane Etherington (Jane Hatter)
Department of School of Music
Incorporating Early Female Composers in Today’s Violin Repertoire

1:20pm  Valeria Jimenez (Jesus Valero)
Department of Political Science
The Role of Nonprofit Organizations in Promoting Higher Education Among Latina/o Youth: The Case of Latinos in Action (LIA) of Utah
1:40pm  **Joshua Hernandez** (Bonita Austin)  
Department of Entrepreneurship & Strategy  
*Surveying OIS Students' Preparedness and Evaluating the Importance of Soft Skills in the Job Market*

2:00pm  **Kiman Kaur** (Susie Porter)  
Department of Gender Studies  
*Can Reproductive Freedom Be Achieved by Decolonizing What Pleasure, Love, and Resistance Look Like? Cases of Womxn of Color Facing Reproductive Injustices*

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**ROOM 311**

**Moderator:** **Catherine Showalter** (Linguistics)

1:00pm  **Cassidy Hoff** (Danielle Endres)  
Department of Communication  
*The Utes Nickname: Mascots, Symbols, And Nicknames A Critical Discourse Analysis*

1:20pm  **Patrick Warr** (Erin Jensen)  
Department of Writing & Rhetoric Studies  
*Prescription Narcotic and Illicit Drug Abuse: Needed Change in Public Health Policies and Clinical Practices*

1:40pm  **Christian Hansen** (Alf Seegert)  
Department of English  
*Visionary Minds, Visionary Worlds: Analysing The Works Of Fumito Ueda, Hidetaka Miyazaki, And Jenova Chen*

2:00pm  **Sarah Bischoff** (Lisa Swanstrom)  
Department of English  
*Genre Ghosts: Confessions in Postcolonial Spaces*
ROOM 312

Moderator: **Carlene Diets Lebhn** (Psychology)

1:00pm **April Keene** (Jack Broughton)
Department of Anthropology
*Black Bones: Distinguishing Burned from Stained*

1:20pm **Nicolle Eldredge** (Elisabeth Conradt)
Department of Psychology
*Maternal Stress And The Development Of Infant Regulatory Processes*

1:40pm **Christopher Jones** (Trafton Drew)
Department of Psychology
*Neural Correlates of Consolidation Into Visual Working Memory*

2:00pm **Thulasi Seshan** (Kathleen Nicoll)
Department of Geography
*Comparative Indigenous Water Rights in Australia and the Western United States*

ROOM 319

Moderator: **Monty Paret** (Art & Art History)

1:00pm **Adam Fuller** (Stephanie Doktor)
Department of School of Music
*Wynton Marsalis and Nicholas Payton: A Comparative Discourse*

1:20pm **Angela Lee** (Pamela Geber-Handman)
Department of School of Dance
*How Creative Movement Practices, Such As Storytelling And Personal Narrative, Act As A Medium For People With Disabilities To Understand And Express Identity*
1:40pm  **Sayde Price** (Monty Paret)  
Department of Art & Art History  
*To Move and Be Still: Time in Tacita Dean’s JG*

2:00pm  **Cece Otto** (Robert Scott Smith)  
Department of Theatre  
*Creating a Devised Theatrical Piece to Travel to the Edinburgh Fringe Festival*
MAIN BALLROOM

Poster 1: Greydon Benzmiller (Edward Rubin)
Department of Linguistics
Foul Play: Gender, Perception, and Profanity in 21st century America

Poster 1: Joseph Ciucci Liuzzi (Edward Rubin)
Department of Linguistics
Foul Play: Gender, Perception, and Profanity in 21st century America

Poster 1: Amber Robb (Edward Rubin)
Department of Linguistics
Foul Play: Gender, Perception, and Profanity in 21st century America

Poster 2: Mary Stringham (Sarah Hollenberg)
Department of Art & Art History
Exploring Today’s Definition of Global Contemporary Art

Poster 3: Bri Milot (Jennifer Shah)
Department of Geography
Point Intercept Transect Surveys on Myrtle Spurge (Euphorbia myrsinites)

Poster 4: Ria Sandhu (Jill Shea)
Department of Surgery
Dual Reservoir Nerve Guide Conduit Incorporated with FK506 and GDNF as a Novel Approach for Peripheral Nerve Regeneration

Poster 5: Amanda Groneman (Marissa Diener)
Department of Family & Consumer Studies
Educational Programming: A Coping and Distraction Technique in Pediatric Hospital Settings
Poster 6: **Yuanhang Zhao** (Stavros Drakos)  
Department of Internal Medicine  
*Understanding the role of VDAC2 in heart failure and intracellular calcium regulation*

Poster 7: **Marilynn Santana** (Bruce Ellis)  
Department of Psychology  
*Can Early Childhood Adversity Improve Cognitive Abilities?*

Poster 8: **Kaley Tucker** (Brian Codding)  
Department of Anthropology  
*Geospatial Analysis of the Distribution of Spent Cores In Grand County Utah*

Poster 9: **Megan Shaw** (Caren Frost)  
Department of Social Work  
*Effect of Quality Training for Refugee Childcare Providers*

Poster 10: **Emily Tippetts** (Julie Hollien)  
Department of Biology  
*Role of Drosophila Ire1’s C terminal domain in RIDD pathway specificity*

Poster 11: **Rebecca Lewis** (Dimitri Trankner)  
Department of Biology  
*Developing an Electric Arena for Testing Cognitive Ability in Mice*

Poster 12: **Spencer Ericksen** (Spencer Ericksen)  
Department of Internal Medicine  
*Effects of Glycyrrhetinic Acid on Wound Healing Processes in a Colorectal Tumor Mouse Model*

Poster 13: **Jennifer Isenhour** (Lee Raby)  
Department of Psychology  
*Longitudinal Investigation Of The Enduring Effects Of Early Social Deprivation And The Diurnal Cortisol Regulation Of Internationally Adopted Children*

Poster 14: **Ryan Herman** (Shannon Charles)  
Department of School of Accounting  
*The Impact of Dodd-Frank Legislation on the Mortgage Market Risk Environment*
Poster 15: **Michelle Ngo** (Carolyn Bliss)
LEAP
*The Effect of Prenatal Stress on Early Infant Life*

Poster 16: **Mary Ngo** (Carolyn Bliss)
LEAP
*Gait Speed in Stroke Patients*

Poster 17: **Ronak Intwala** (Carolyn Bliss)
LEAP
*Fluorogenic Probes of Enzyme Activity*

Poster 18: **Mateo Godinez** (Stephen Trapp)
Department of Psychology
*Tilt Tracker*

Poster 19: **Marisa Bell** (Thomas Kursar)
Department of Biology
*Characterization of Polyphenolics in I. umbellifera*

Poster 20: **Gannon Day** (Claudia Geist)
Department of Sociology
*The Effect of Women Veterans on the Labor Force*

Poster 21: **Ann Mauck** (Claudia Geist)
Department of Gender Studies
*Women and the Big Four: PR vs. HR*

Poster 22: **Artemis Sefandonakis** (Alex Terrill)
Department of Occupational and Recreation Therapies
*ReStoreD*

Poster 23: **Daniela McCroby** (Katherine Supiano)
Department of Nursing
*Distance-technology Delivered Grief Support Program-Perceived Quality and Satisfaction of Training Provided to Social Workers*

Poster 24: **Chris Rapp** (Bryan Jones)
Department of Ophthalmology & Visual Sciences
*ON Cone Bipolar Coupling in Mouse Retina*
Poster 25: **Jeffrey Lunt** (Donna Cross)  
Department of Radiology & Imaging Sciences  
*FDG-PET Imaging of Repeat Traumatic Brain Injury and Response to Therapy in Mice*

Poster 26: **Megan Tyler** (Maureen Mathison)  
Department of Writing & Rhetoric Studies  
*Gamification of Biology Literacy*

Poster 27: **Andrew Sedley** (Dimitri Trankner)  
Department of Biology  
*Egocentric Navigation in a Morris Water Maze for Testing Memory Formation in Mice*

Poster 28: **Jesus Gomez** (Feng Liu)  
Department of Materials Science and Engineering  
*Managing Musculoskeletal Pain with Combined Modalities in Nanoxene and Thermally Responsive Polymer Networks*

Poster 29: **Cason Acor** (Bryan Bonner)  
Department of Management  
*The Power of Virtual Reality to Promote Empathy in the Workplace*

Poster 29: **Chandler Dean** (Bryan Bonner)  
Department of Management  
*Virtual Reality and Its Effects on Empathy*

Poster 29: **Luke Hansen** (Bryan Bonner)  
Department of Management  
*The Effects of Virtual Reality on Empathy*

Poster 30: **Lauren Brocious** (Rachel Hayes-Harb)  
Department of Linguistics  
*L2 Orthographic Input and the Three-way Korean Consonant Contrast*

Poster 31: **Alex Cipro** (Aniko Csirmaz)  
Department of Linguistics  
*Spatial interpretation of the prepositions ‘in’ and ‘within’*

Poster 32: **Franco Jin** (John Fadul)  
Department of Oncological Sciences
Oncogenic KRas drives invasion of epidermal cells into the zebrafish body

Poster 33: **TK Baker** (Thomas Richmond)
Department of Chemistry
*Online Faraday Lectures*

Poster 34: **Michelle Sanchez** (Ning Tian)
Department of Ophthalmology & Visual Sciences
*Categorizing the Bipolar Cells in JAMB and BD Cells*

Poster 35: **Max Alfonso** (Susan Bock)
Department of Bioengineering
*N-glycosylation Analysis of Hemagglutinin Spikes on Influenza Virus-like Particles Produced in Trichoplusia ni Living Bioreactors*

Poster 36: **Michael Gibbons** (Kevin Whitty)
Department of Chemical Engineering
*Experimental Apparatus and CuO-SiO2 Particle Development for Chemical Looping with Oxygen Uncoupling (CLOU)*

Poster 37: **Nikol Yonemura** (Micah Drummond)
Department of Physical Therapy and Athletic Training
*Role of skeletal muscle macrophages in inactivity-induced insulin resistance*

Poster 38: **Zeke Richards** (Shannon Odelberg)
Department of Internal Medicine
*Development and Characterization of a Genetic Model of Uveal Melanoma*

Poster 39: **Taylor Russell** (Cheryl Wright)
Department of Family & Consumer Studies
*Choreografish - A VR game aimed at reducing anxiety in young adults with ASD*

Poster 40: **Mariah Arave** (Ryan Schacht)
Department of Anthropology
*Life Elevated: investigating the association between altitude and depression*
Poster 41: **Justin Swanger** (Jerry Root)  
Department of World Languages & Cultures  
*Material Reality In and About the Legend of Theophilus*

Poster 42: **Nathan Crispo** (Claudia Geist)  
Department of Sociology  
*The Effect of Firearm Ownership On Violent Crime*

Poster 43: **Yasmeen Siripathane** (Annette Fleckenstein)  
Department of Dentistry  
*Methcathinone Administration Decreases Dopamine Transporter Function*

Poster 44: **Madison Keyser** (Thomas Maloney)  
Department of Economics  
*Utah Nonprofits: Effects on the Economy and Career Opportunities for Women*

Poster 45: **Mitch Johansen** (Akiko Kamimura)  
Department of Health, Kinesiology, and Recreation  
*Mental Health Perceptions Among College Students in Vietnam and in the US*

Poster 46: **Miranda Jones** (Akiko Kamimura)  
Department of Sociology  
*Indigenous Peoples’ Health in the United States of America: Review of Lifestyle Issues and the Implementation of Community-Based Participatory Research*

Poster 47: **Sarah Elizabeth Levitt** (Akiko Kamimura)  
Department of Sociology  
*Using the Tool for Assessing Cultural Competence Training (TACCT) to Measure Nutrition and Dietetics Program Curriculums*

Poster 48: **Zachary Pickering** (Meredith Metzger)  
Department of Mechanical Engineering  
*Glider Air Craft Project*

Poster 49: **Brenda Espitia** (Carolyn Bliss)  
LEAP  
*The Act of Giving: St. Paul’s Food Pantry*
Poster 50: **Hannah Samowitz** (Monisha Pasupathi)  
Department of Psychology  
*The effects of air pollution salience and place attachment on supporting an environmental organization*

Poster 51: **Noelia Juarez** (Akiko Kamimura)  
Department of Sociology  
*Perspectives of health care services among free clinic patients in the USA: A qualitative study*

Poster 51: **Emely Puerto** (Akiko Kamimura)  
Department of Sociology  
*Perspectives of health care services among free clinic patients in the USA: A qualitative study*

Poster 52: **Henry Doan** (Carolyn Bliss)  
LEAP  
*The Impacts of College Exposure Among Asian American Youth*

Poster 53: **Jaz Hurley** (Akiko Kamimura)  
Department of Sociology  
*Evaluation of Intimate Partner Violence Curriculum in Residency Training Programs*

Poster 54: **Thomas Brown** (Kristen Kwan)  
Department of Human Genetics  
*Abnormal ECM composition disrupts tissue de-adhesion*

Poster 55: **Maggie Gardner** (Cheryl Wright)  
Department of Family & Consumer Studies  
*College Experiences of Students with Autism: Parental Perceptions*

Poster 56: **Barbara Kufiadan** (Deanna Kepka)  
Department of Nursing  
*Utah Dental Association Perceptions, Knowledge, and Clinical Procedures Regarding Human Papillomavirus Oropharyngal Cancer*

Poster 57: **Ellie Kaiser** (Rachel Hayes-Harb)  
Department of Linguistics  
*VOTs of Voiced and Voiceless Stops in Spanish and English: A Partial Replication of Flege and Eefting (1987)*
Poster 58: **Nicole Mortensen** (Jeffrey Bates)
Department of Materials Science and Engineering
*Molecularly Imprinted Hydrogels for Drug Delivery Usages*

Poster 59: **Danika Sommer** (Sheri Holmen)
Department of Surgery at Huntsman Cancer Institute
*Development of an Inducible Rodent Model for BRAFV600E Mutant Gliomas*

Poster 60: **Kiana Wong** (Carolyn Bliss)
LEAP
*Reach For Your Dreams Program: Exposing Third Grade Students to Higher Education*

Poster 61: **Katie Rasmussen** (Megan Reynolds)
Department of Sociology
*Awareness and Access to Support Resources among Refugee Women in Salt Lake City Experiencing Sexual and Gender-Based Violence*

Poster 62: **Bailey Tibbet** (Hongyong Sohn)
Department of Metallurgical Engineering
*Photocatalysis Property of Aluminum Doped Zinc Oxide (AZO)*

Poster 63: **Naveen Rathi** (Bruce Gale)
Department of Mechanical Engineering
*A Spiral Channel Device for Microfluidic Sperm Processing: A Potential Tool for Male Infertility*

Poster 64: **Jennifer Bridgeman** (Cagan Sekercioglu)
Department of Biology
*Identifying the Density, Distribution, and Habitat Use of Raptors in City Creek Canyon*

Poster 65: **Nicholas Bitter** (John Lin)
Department of Atmospheric Sciences
*Carbon Dioxide and its Isotopic Composition in Salt Lake City 2001-2017*

Poster 66: **Crystal Japngie Green** (Anna Hallar)
Department of Atmospheric Sciences
*Climatology of Aerosol Optical Properties from Storm Peak Laboratory*
Poster 67: Julianne Aldous (Julianne Aldous)
Department of Political Science
Deconstructing Arguments Against the Financial Stability Oversight Council and the Consumer Financial Protection Bureau

Poster 68: David Petersen (Ed Rubin)
Department of Linguistics
Perceived Importance as a Factor in Second Language Vocabulary Acquisition

Poster 68: Heidee Ward (Ed Rubin)
Department of Linguistics
Perceived Importance as a Factor in Second Language Vocabulary Acquisition

Poster 69: Jeeone Park (Benjamin Ellis)
Department of Bioengineering
Development of High-Fidelity Computer Simulation Model of Human Cervical Spine

Poster 70: Julia Zhu (Cynthia Burrows)
Department of Chemistry
Will guanine undergo oxidation via TET1 and TET2?

Poster 71: Sarah Wilmot (Andrea Brunelle)
Department of Geography
A comparison of climate proxy data from two Bonneville basin sediment cores

Poster 72: Caroline Foley (Shane Macfarlan)
Department of Anthropology
Movement in 19th Century Baja

Poster 73: Cheryle Lloyd (Frank Drews)
Department of Psychology
Barriers in Safety: Face Shield Adherence in Laboratory Settings

Poster 74: Danika Li (Marjorie Castle)
Department of Political Science
The Tiananmen Square Massacre: Understanding State-Sponsored Violence
Poster 75: **Samantha Cooper** (Carolyn Bliss)
LEAP
*Reach for Your Dreams*

Poster 76: **Carol Foote** (Hugh Cagle)
Department of History
*The Opioid Epidemic in Salt Lake City*

Poster 77: **Kacey Davis** (Martin Horvath)
Department of Biology
*Expression and Purification of Augertoxins*

Poster 78: **Suzannah Stark** (Claudia Geist)
Department of Sociology
*Gender and the classroom*

Poster 79: **Caitlin Tominey** (Susanna Cohen)
Department of Nursing
*Can Simulation be done in Low-Resource Settings? Provider Evaluation of PRONTO Training across Four Low-Income Countries*

Poster 80: **Erica Savage** (Jeffrey Coles)
Department of Finance
*Examination of Potential Productivity Decline in the Construction Industry*

Poster 81: **Megan Adams** (Dmitry Bedrov)
Department of Materials Science and Engineering
*Simulation of Silicon and Silicon/Graphite Composite Anodes in Lithium Ion batteries using the Material Point Method.*

Poster 81: **Galen Grantham** (Dmitry Bedrov)
Department of Materials Science and Engineering
*Simulation of Silicon and Silicon/Graphite Composite Anodes in Lithium Ion batteries using the Material Point Method.*

Poster 81: **Chris Hancock** (Dmitry Bedrov)
Department of Materials Science and Engineering
*Simulation of Silicon and Silicon/Graphite Composite Anodes in Lithium Ion batteries using the Material Point Method*
Poster 82: Jenna Novy (Jason Shepherd)  
Department of Biology  
*Specific Marking of Active Synapses using a Novel Synaptically Localized Activity Reporter (SLAyR)*

Poster 83: Tyler Gill (Charlie Hicks-Little)  
Department of Physical Therapy & Athletic Training  
*Effects of Vinyasa Yoga on Postural Stability*
POSTER SESSION II
10:45 – 12:15pm

MAIN BALLROOM

Poster 1: Naomi Baende (Carolyn Bliss)
LEAP
Utilizing TRPV1-CRE/GCaMP6 Genotype Mice to Investigate Pain Mechanisms

Poster 1: Lesley Mendoza (Carolyn Bliss)
LEAP
Utilizing TRPV1-CRE/GCaMP6 Genotype Mice to Investigate Pain Mechanisms

Poster 1: Trevon Michael (Carolyn Bliss)
LEAP
Utilizing TRPV1-CRE/GCaMP6 Genotype Mice to Investigate Pain Mechanisms

Poster 2: Jesus Gomez (Feng Liu)
Department of Materials Science and Engineering
Combined heat therapy alongside NIPAam and butenediol copolymer cross-linked hydrogels and their applications to transdermal drug delivery

Poster 3: Jesse Griffin (Bruce Gale)
Department of Bioengineering
Integration of Different Materials on a Spiral Channel Design to Optimize Microfluidic Sperm Sorting Continued

Poster 4: Maddie Bernardo (Gary Rose)
Department of Biology
Gender Plasticity and Social Control of Sex Determination in Thalassoma Bifasciatum

Poster 5: Sydney Cahoon (Melissa Schaefer)
Department of Anthropology
Temporal Howler Feeding Patterns of La Selva Howler Monkeys (Alouatta palliata)
Poster 6: **Kaelyn Leonard** (Anne Jamison)
Department of English
*Fanfiction and Anxiety*

Poster 7: **Natalie McElroy** (Jeanine Stefanucci)
Department of Psychology
*Investigating Static and Dynamic Spatial Abilities in Dancers*

Poster 8: **Justin Cho** (Edward Rubin)
Department of Linguistics
*Frequently made student errors in adult ESL language acquisition*

Poster 8: **Sarah Johnson** (Edward Rubin)
Department of Linguistics
*Frequently Made Student Errors in Adult ESL Language Acquisition*

Poster 8: **Shelly Miao** (Edward Rubin)
Department of Linguistics
*Frequently made student errors in adult ESL language acquisition*

Poster 9: **Jordan Pieper** (Ivis Garcia)
Department of City & Metropolitan Planning
*Aging in Place, Life-Space Mobility*

Poster 10: **Keeton Hodgson** (Rajeev Balasubramonian)
Department of School of Computing
*DNA Sequence Alignment*

Poster 11: **Nik Parcell** (Thomas Zangle)
Department of Chemical Engineering
*Automated X-Y-Z Translation Stage for Screening of Chemotherapies Using Quantitative Phase Microscopy*

Poster 12: **Jeong Park** (Thomas Zangle)
Department of Chemical Engineering
*Measurements of pH and Oxygen Concentration Using Fluorescent and Luminescent Reporters*

Poster 13: **Morgan Victorine** (Kenner Kingston)
Department of School of Architecture
*Regenerative Design through Material Selection*
Poster 14: **Amy Record** (Kristine Pankow)
Department of Geology and Geophysics
*Determining seismicity in south-central Utah in conjunction with the Play Fairway project*

Poster 15: **Jennifer Nelson** (Chuck Dorval)
Department of Bioengineering
*Real-Time Measurement of Brain Oscillation Power Levels*

Poster 16: **Charles Hellige** (Stephen Goldsmith)
Department of Architecture
*Effective, Equitable Community Engagement Processes*

Poster 17: **Alex Blackburn** (H. James de St. Germain)
Department of School of Computing
*Learning Musical Style*

Poster 18: **Asia Susko** (Kevin Jones)
Department of Biology
*Mechanism of YM155 in the Inhibition of Survivin in Synovial Sarcomagenesis*

Poster 19: **Jordin Hartley** (Jennifer Watt)
Department of Geography
*Reconstructing a fire History Record and Disturbance Patterns for a High Elevation Site in the Northern Rocky Mountains*

Poster 20: **Steven Sun** (Jim Germain)
Department of School of Computing
*Teaching Computers How to Read Music*

Poster 21: **Steven Carlson** (Timothy Smith)
Department of Psychology
*Emotion Regulation in Sleep and Suicide: A Preliminary Analysis*

Poster 22: **Brecca Breach** (Claudia Geist)
Department of Sociology
*How Gender Biases Deter Women from Entering STEM Fields*

Poster 23: **Derek Betker** (Ed Rubin)
Department of Linguistics
*Code Correction: Breaking The Code*
Poster 23: **Katrina Bocanegra** (Ed Rubin)  
Department of Linguistics  
*Code Correction: Breaking The Code*

Poster 23: **Maranda Mumm** (Ed Rubin)  
Department of Linguistics  
*Code Correction: Breaking The Code*

Poster 24: **Keiko Cawley** (Junco Warren)  
Department of Internal Medicine  
*Epigenetic Regulation of Energy Metabolism by the Histone Methyltransferase Smyd1 in the Murine Diabetic Heart*

Poster 25: **Emerson Ford** (Brian Haymore)  
Department of School of Computing  
*Dynamic Virtual Resources within a High Performance Computing Environment*

Poster 26: **Katie Donovan** (Sophie Caron)  
Department of Biology  
*Drosophila melanogaster innate response to ethyl isovalerate*

Poster 27: **Alicia Dibble** (Jeff Bates)  
Department of Materials Science and Engineering  
*Assessing Degradation Lifetimes of Sustainable Alternative Materials for Hygiene Products*

Poster 28: **Zac Williams** (Kieth Diaz Moore)  
Department of School of Architecture  
*Spatial Configuration and Life for People with Attention Deficit Hyperactivity Disorder*

Poster 29: **Alex Cipro** (Rachel Hayes-Harb)  
Department of Linguistics  
*Effects of Repeated Evaluation on Acceptability Rating of Sentences: A Partial Replication of Zervakis and Mazuka (2012)*

Poster 30: **Alex Shu** (Jill Shea)  
Department of Surgery  
*Optimization and Drug Release Kinetics of a Bioresorbable Nerve Conduit*
Poster 31: **Gemma Clark** (Jennifer Weidhaas)
Department of Civil and Environmental Engineering
*Pathogens in Harvested Rooftop Rainwater from Various Roofing Materials*

Poster 32: **Naveen Rathi** (Carolyn Bliss)
LEAP
*Bryant and Beyond Tutoring: Keys to a Successful Leap from High School to College*

Poster 33: **Ellie Zurbuchen** (Danny Hung-Chieh Chou)
Department of Chemistry
*Iminoborane Synthesis For a Glucose Responsive System*

Poster 34: **Hunter Frederiksen** (Catherine Loc-Carrillo)
Department of Internal Medicine
*Pharmacokinetics of Locally Delivered Powder Vancomycin and Vancomycin Loaded Hydrogel*

Poster 35: **Billy Finlay** (Rachel Hayes-Harb)
Department of Linguistics
*Acoustic features of vowels in clear and conversational speech: A partial replication of Ferguson and Quené (2014)*

Poster 35: **Julia Vonessen** (Rachel Hayes-Harb)
Department of Linguistics
*Acoustic features of vowels in clear and conversational speech: A partial replication of Ferguson and Quené (2014)*

Poster 36: **Tina Tran** (Josh Bonkowsky)
Department of Pediatrics
*Understanding Adrenoleukodystrophy Pathogenesis Through Targeted Screening and Gene Analysis*

Poster 37: **Spenser Owens** (Yihui Pan)
Department of Finance
*Shareholder Activism and Gender Diversity in Public Companies*

Poster 38: **Tiana Chaparro** (Kim Hackford-Peer)
Department of Gender Studies
*Responding to the School to Prison Pipeline through Restorative Practices*
Poster 39: **Hannah Gay** (Steven Nal)
Department of Mechanical Engineering
*Analyzing Potential Biosorbents for the Purification of Heavy Metal Ions in Wastewater*

Poster 39: **Ananya Sriram** (Steven Naleway)
Department of Mechanical Engineering
*Analyzing Potential Biosorbents for the Purification of Heavy Metal Ions in Wastewater*

Poster 40: **Tanner Snow** (Owen Kingstedt)
Department of Mechanical Engineering
*Dynamic Loading of Materials*

Poster 41: **Kelvin Taylor** (Claudia Geist)
Department of Sociology
*Paternal Leave compared to Maternity Leave in the United States*

Poster 42: **Shravan Parthasarathy** (Noel Carlson)
Department of Neurobiology & Anatomy
*Examining the Presence of the Interleukin-2 Receptor in Oligodendrocyte Precursor Cells*

Poster 43: **Bailey Johannsen** (Bailey Johannsen)
Department of Bioengineering
*Assay for presence of allergenic core alpha 1,3 fucose on flu hemagglutinin virus-like particles produced in Trichoplusia ni and Spodoptera frugiperda living insect biofactories*

Poster 44: **Carly Shields** (Marissa Diener)
Department of Family & Consumer Studies
*Needs of Youth with Autism Spectrum Disorder (ASD) in Health Care Settings*

Poster 45: **Jackson Bodtker** (Jeffery Moore)
Department of Geology and Geophysics
*Thermal Deformation of Sandstone Arches*

Poster 46: **Keaton Colledge** (Edward Rubin)
Department of Linguistics
*An analysis of semantic shift in proto-Indo-European cognates in Swedish and Greek*
Poster 46: **Alyssa Hawkins** (Ed Rubin)  
Department of Linguistics  
*An analysis of semantic shift in proto-Indo-European cognates in Swedish and Greek*

Poster 47: **Eric Nhem** (Carol Sansone)  
Department of Psychology  
*Comparing Educational Engagement and Extracurricular Activity Participation for First-Generation Versus Continuing-Generation College Students*

Poster 48: **Sierra Jensen** (Steven Burian)  
Department of Civil and Environmental Engineering  
*Effect of the Future Stormwater Permit Changes on the Flow in the Jordan River*

Poster 49: **Ellie Kaiser** (Tanya Flores)  
Department of World Languages & Cultures  
*Voice Onset Time in Young Spanish-English Bilinguals*

Poster 50: **Chase Zagorec-Marks** (Matthew Kieber-Emmons)  
Department of Chemistry  
*Understanding Dynamic Motions Involved in the Photocycle of Photoactive Yellow Protein*

Poster 51: **Zach Earl** (Ed Rubin)  
Department of Linguistics  
*The Stroop Effect in Kana and Kanji Scripts*

Poster 51: **Mackenzie Kerr** (Ed Rubin)  
Department of Linguistics  
*The Stroop Effect in Kana and Kanji Scripts*

Poster 52: **Halley Mallory** (Andy Hoffmann)  
Department of Honors College  
*Best Possibilities for Sustainable Cities*

Poster 53: **Ronny Nguyen** (Carolyn Bliss)  
LEAP  
*Reach for Your Dreams*
Poster 54: **Carlo Cardozo** (Bradley Fawver)
Department of Health, Kinesiology, and Recreation  
*Understanding Diagnostic Errors in Radiology*

Poster 57: **Eric Tokita** (Bruce Edgar)
Department of Human Genetics  
*Validating regional-specific Gal4 Lines and testing the non-autonomous cell activation of Hippo pathway*

Poster 59: **Carlie Haacke** (Lauren Liang)
Department of Educational Psychology  
*Young Readers’ Interactions with Storybook Apps*

Poster 60: **Diana Kelly** (Jared Rawlings)
Department of School of Music  
*Federal Education Reform and Music Education: A Review of the Literature and Implications for the Future*

Poster 61: **Jessica Capener** (Claudia Geist)
Department of Sociology  
*The Great Glass Elevator in Nursing*

Poster 62: **Chance Miller** (Chance Miller)
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 63: **Dylan Drapeau** (Catherine Loc-Carrillo)
Department of Surgery  
*Effectiveness of Antimicrobial Treatments on S. Aureus and P. Aeruginosa Biofilms*

Poster 63: **Madeline Berger** (Catherine Loc-Carrillo)
Department of Surgery  
*Effectiveness of Antimicrobial Treatments on S. Aureus and P. Aeruginosa Biofilms*

Poster 64: **Jason Tey** (Carolyn Bliss)
LEAP  
*Bryant and Beyond- West High*
Poster 64:  **Mateo Godinez** (Carolyn Bliss)
LEAP  
*Bryant and Beyond- West High*

Poster 64:  **Amelia St Clair** (Carolyn Bliss)
LEAP  
*Bryant and Beyond- West High*

Poster 65:  **Mitchell Lee** (Maureen O'Hara Ure)
Department of Art & Art History  
*A Study in Self Portraiture*
Poster 1: **Lilly Kanishka** (Carolyn Bliss)
LEAP
*Bryant and Beyond Tutoring: Keys to a Successful Leap from High School to College*

Poster 1: **Karlee Chipman** (Carolyn Bliss)
LEAP
*Bryant and Beyond Tutoring: Keys to a Successful Leap from High School to College*

Poster 1: **Elizabeth Aviles** (Carolyn Bliss)
LEAP
*Bryant and Beyond Tutoring: Keys to a Successful Leap from High School to College*

Poster 2: **Jared Potter** (Kevin Jones)
Department of Orthopaedics
*Modeling synovial sarcoma metastasis in the mouse: PI3’-lipid signaling and inflammation*

Poster 3: **Daniel Razo** (Benjamin Slade)
Department of Linguistics
*Repetitives in Spanish, From Older Varieties to Modern Spanish*

Poster 4: **Annelise Murphy** (Samantha Joel)
Department of Psychology
*Consensual Non-Monogamy: Do Motives Matter?*

Poster 5: **Jihyun Noh** (Jennifer Follstad-Shah)
Department of Geography
*Temperature Sensitivity of Litter Breakdown in Streams Mediated by Microbes and Detritivores Consuming Leaves of Different Quality*
Poster 6: **Morgan Johnson** (Stacy Manwaring)  
Department of Communication Sciences and Disorders  
*Examination of Play Behaviors in Young Children at-risk for Autism Spectrum Disorder*

Poster 7: **James Ellis** (Russell Butterfield)  
Department of Neurology  
*Refractory Status Epilepticus and Chronic Kidney Disease in a Large Pedigree Due to a Variant in The Mitochondrially Encoded tRNA Phenylalanine (MT-TF) Gene*

Poster 8: **Sophia Hill** (Jacqueline Chen)  
Department of Psychology  
*Threat of being labeled a racist and how it affects the ability to pay attention and process complex information.*

Poster 9: **Leah Fitzgerald** (Stacy Manwaring)  
Department of Communication Sciences and Disorders  
*Parent Response to the Gestures of Children with Language Delays*

Poster 10: **Laurel Fortun** (Melissa Schaefer)  
Department of Anthropology  
*A Comparison of Intrasexual and Intersexual Affiliative and Agonistic Behaviors Between Mantled Howler Monkey (Alouatta palliata) Groups at La Selva Biological Station, Costa Rica*

Poster 11: **Max Sidesinger** (Mike Shapiro)  
Department of Biology  
*The Developmental Basis of Almond Feather Pigmentation and Eye Defects In Domestic Pigeons*

Poster 12: **Katie Allen** (Jeff Bates)  
Department of Materials Science and Engineering  
*Wearable Electronic for Cystic Fibrosis Diagnosis*

Poster 12: **Leon Hasic** (Jeff Bates)  
Department of Materials Science and Engineering  
*Wearable Electronic for Cystic Fibrosis Diagnosis*

Poster 13: **Jasmine Reading** (Kathleen Nicoll)  
Department of Geography  
*Mercury in Utah ecosystems*
Poster 14: **Karissa Wang** (Martin Tristani-Firouzi)  
Department of Pediatrics  
*Correction of mutation in atrial fibrillation susceptibility gene NFATc1 using a CRISPR-Cas9 system*  

Poster 15: **Truc Vuong** (Kent Golic)  
Department of Biology  
*Ring Chromosome Lethality in Drosophila melanogaster*  

Poster 16: **Samantha Hayashi** (Julie Hollien)  
Department of Biology  
*Lysosomal Movement During ER Stress*  

Poster 17: **Bryce Alex** (Çağan Şekercioğlu)  
Department of Biology  
*Generating minimum population size estimate for brown bears in eastern turkey using multilocus genotyping*  

Poster 18: **Kelli Hafer** (Kent Bachus)  
Department of Orthopaedics  
*Negative Pressure Increases Blood Vessel Density around Percutaneous Devices*  

Poster 19: **Daniel Avery** (Angela Rasmussen)  
Department of Electrical and Computer Engineering  
*Mobile Pet Entertainer*  

Poster 20: **Chloe Betts** (Mitchell Power)  
Department of Geography  
*Comparing Ecosystem Structural Development and Fire Adaptation Under Contrasting Precipitation Regimes Over Long-Time Scales*  

Poster 21: **Dallin Romney** (Kay Park)  
Department of Mechanical Engineering  
*Fundamental studies of Nanoscale Electron and Photon Transport*  

Poster 22: **Rebecca Avery** (Neil Cotter)  
Department of Electrical and Computer Engineering  
*Recycled Energy Cooling System*  

Poster 23: **Anderson Fackler** (Erik Jorgensen)  
Department of Biology
Identification of kin-20 and unc-119 knockout suppressors associated with neuronal development and maintenance in C. elegans

Poster 24: **Dorien Butter** (Andrew Merryweather)
Department of Mechanical Engineering
Effect of Terrain Transitions on Postural Imbalances and Gait Discontinuities

Poster 25: **Carter Pruetz** (Brandon Peterson)
Department of Philosophy
Material Objects as Divine Intermediaries

Poster 26: **John Richardson** (Daniel Levin)
Department of Political Science
Religious Liberty, Equal Protection, and the Utah Compromise

Poster 27: **Myrna Groomer** (Andrea Brunelle)
Department of Geography
Paleoecological reconstruction of ancient Lake Bonneville through sediment analysis

Poster 28: **Abbie Ireland** (Abbie Ireland)
Department of Oncological Sciences
Understanding Mechanisms of Progression and Chemo-Resistance of Small Cell Lung Cancer

Poster 29: **Mandy Robisom** (Akiko Kamimura)
Department of Sociology
Maliheh Opiod Project

Poster 29: **Tuane Ellis** (Akiko Kamimura)
Department of Sociology
Opiod Misuse Amongst Uninsured Patients Utilizing Free Clinic

Poster 29: **Sullivan Howard** (Akiko Kamimura)
Department of Sociology
Opioid Abuse Amongst Uninsured Patients Utilizing a Free Clinic

Poster 30: **Anthony Calacino** (Anthony Calacino)
Department of Political Science
Automatic Text Analysis of Constitutions: The Content of Authoritarian Constitutions
Poster 31: Christian Kodele (Jindrich Kopecek)
Department of Pharmaceutics & Pharmaceutical Chemistry
*Multivalent Human Serum Albumin - Rituximab Fab’ Conjugates Induce Apoptosis In Lymphoma Cells*

Poster 32: Vasiliki Karahalios (Christine Jones)
Department of World Languages & Cultures
*19th-Century Sleeping Beauties: Analysis of an Archetype*

Poster 33: Annie Rowley (Kai Kuck)
Department of Bioengineering
*Estimating Energy Expenditure for Elective Surgery Using a Microsoft Kinect*

Poster 34: Allie Kachel (Rajesh Menon)
Department of Bioengineering
*Image reconstruction to overcome light scattering effects of a difusive medium*

Poster 35: Lea Karabegovic (Catherine Sherwin)
Department of Pharmacology and Toxicology
*Antiepileptic Drug Use during Pregnancy*

Poster 36: Saba Saleem (Carolyn Bliss)
LEAP
*The association of NFAT c1 with atrial fibrillation*

Poster 37: Kathryn Hein (Brendan Duffy)
Department of Civil and Environmental Engineering
*Crash Data Initiative*

Poster 38: Sarah Wait (Trudy Oliver)
Department of Oncological Sciences
*The Role of Neutrophils in the Progression of Lung Cancer*

Poster 39: Varun Adhvaryu (Megan Williams)
Department of Neurobiology & Anatomy
*Localization of Synaptic Specificity Gene Kirrel3 in the Hippocampus*

Poster 40: Siani Weston (Gabriel Fine)
Department of Radiology & Imaging Sciences
Development of T Cell Receptor Transgenic T Cells for the Treatment of Hepatocellular Carcinoma

Poster 41: **Merry Joseph** (Jody Rosenblatt)
Department of Oncological Sciences
*Asthmatic Bronchoconstriction Through Excessive Extrusion Damages Airway Epithelia*

Poster 42: **Haisley Brooking** (Mikhail Skliar)
Department of Chemical Engineering
*Functional Response of Normal-Like Cells to Oncosomal Signaling*

Poster 44: **David Jiang** (Lucas Timmins)
Department of Bioengineering
*Design and Construction of a Magnetic Resonance Imaging Compatible Physiologic Flow Circuit*

Poster 45: **Liz Reiss** (Bill Oakley)
Department of Marketing
*Digital Marketing in the 21st Century: The Evolution of the Department of Marketing at the University of Utah*

Poster 46: **Liz Nguyen** (Dipayan Chaudhuri)
Department of Biochemistry
*Using FGF21 as a Biomarker for Mitochondrial Cardiomyopathy*

Poster 47: **Madelina James** (Natalia Torres)
Department of Biology
*Structural Maturity of Induced Pluripotent Stem Cells Derived Cardiomyocytes Depends on Growing Environment*

Poster 48: **Yari Villagomez** (Lauren Lasrich)
Department of Family & Consumer Studies
*Autism Patients in Healthcare*

Poster 49: **Jessica Valdes** (Patricia Kerig)
Department of Psychology
*Parental Influences On Recidivism For Youth With Posttraumatic Stress Symptoms*

Poster 50: **David Luna** (Claudia Geist)
Department of Family & Consumer Studies
*The low density of Minorities in Upper Management*
Poster 51: **Stefany Abad** (Eunkyung (Julie) Jeon)  
Department of Communication Sciences and Disorders  
*University of Utah Guidelines for Patients and Parents for Cochlear Implantation*

Poster 52: **Maya Mukai** (Lynn Bohs)  
Department of Biology  
*Capsi-conundrum: Resolving Relationships within Capsiceae (Solanaceae)*

Poster 52: **Katie Sanbonmatsu** (Lynn Bohs)  
Department of Biology  
*Capsi-conundrum: Resolving Relationships within Capsiceae (Solanaceae)*

Poster 53: **Sophie McQuinn** (Tiffany Love)  
Department of Psychiatry  
*The Effects of Childhood Trauma and Sex on Brain Structure*

Poster 54: **Andre Cruz Delgadillo** (Clement Chow)  
Department of Human Genetics  
*Identifying genetic modifiers influencing retinal degeneration*

Poster 55: **May Shaaban** (Donna Cross)  
Department of Neurology  
*Using Paclitaxel to Improve the Outcome After the Last Repeat Concussive Controlled Cortical Impacts*

Poster 56: **Kiana Christensen** (Randall Irmis)  
Department of Geology and Geophysics  
*Analyzing Patterns of Lizard Dental Complexity*

Poster 57: **Cameron Owen** (Peter Armentrout)  
Department of Chemistry  
*Experimental and Theoretical Investigations of Infrared Multiple Photon Dissociation Spectra of Lysine Complexes with Zn2+ and Cd2+.*

Poster 58: **Melissa Chao** (Julie Barkmeier-Kraemer)  
Department of Surgery  
*Studying Collagen Angle Variation in the Recurrent Laryngeal Nerve*
Poster 59: **Takara Truong** (Roseanne Warren)
Department of Mechanical Engineering

Poster 60: **Andrew Lake** (Sara Yeo)
Department of Communication
*Believing Science Satire: Factors that Contribute to Misinterpretation of "Fake News"*

Poster 61: **Ashley Allen** (Elisabeth Conradt)
Department of Psychology
*Maternal Physiologic Stress Responding and Borderline Personality Symptomatology as Predictors of Newborn Neurobehavior*

Poster 62: **Michael Adkins** (Carolyln Bliss)
LEAP
*HoxB8 Microglia Whisker Trim Experiment*

Poster 63: **CJ Reay** (Mark Van Langeveld)
Department of School of Computing
*Procedural Asset Creation Using L-Systems*

Poster 64: **Aydin Tasevac** (Monish Pasupathi)
Department of Psychology
*Cultural Impacts on Individuals’ Interpretations of Distraught Memories*

Poster 65: **Ethan Beseris** (David Carrier)
Department of Biology
*Biological Impact Protection In Human Facial Hair*

Poster 66: **Nick Storey** (Jennifer Follstad Shah)
Department of Geography
*Identification of Nitrogen Loading in the Jordan River through Stable Isotope Analysis*

Poster 67: **Jameson Berg** (Vikram Deshpande)
Department of Physics & Astronomy
*Development of graphene based heterostructures for strain experiments*
Poster 68: **Marianne Mercer** (Katharine Ullman)  
Department of Oncological Sciences  
*Structure Function Analysis of Nup153 to Determine its Role in the Reformation of the Nuclear Envelope during Mitosis in Mammalian Cells*  

Poster 69: **Nate Schwartz** (Rachel Hayes-Harb)  
Department of Linguistics  
*Experiments on the acceptability and possible readings of questions embedded under emotive-factives: A partial replication of Cremers & Chemla 2017*  

Poster 70: **Austin Waters** (Sara Hart)  
Department of Nursing  
*Refugee Families Living in Permanent Supportive Housing: Perceptions of Health Care Utilization and Barriers to Care*  

Poster 71: **Asia Susko** (Carolyn Bliss)  
LEAP  
*Reach For Your Dreams*  

Poster 72: **Rahul Cheeniyil** (Donna Cross)  
Department of Radiology & Imaging Sciences  
*MRI-Guided High Intensity Focused Ultrasound to Treat Traumatic Spinal Cord Injury*  

Poster 74: **Anny Pham** (Carolyn Bliss)  
LEAP  
*Reach for Your Dreams Program: Exposing Title I Third Grade Students to Higher Education*  

Poster 75: **Karishma Shah** (Martin Tristani-Firouzi)  
Department of Pediatrics  
*Cardiac Phenotype Resulting from nfatc1 Gene Knockdown in Zebrafish Embryos*  

Poster 76: **Nicolo Young** (Kent Udell)  
Department of Mechanical Engineering  
*Structural Design And Optimization Of A Collapsible Solar Array*  

Poster 77: **Vincent Young** (Kent Udell)  
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Poster 79: **Ronny Nguyen** (Andrew Rivera)
Department of Internal Medicine
*Determining Influence of SES in Satisfaction of FtM Transgender Patients Following Chest Wall Reconstruction*

Poster 80: **Allyson Berri** (Caren Frost)
Department of Social Work
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Poster 81: **Andrew Kennedy** (Mitchell Power)
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Poster 82: **Sierra Erickson** (Jayant Agarwal)
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Poster 83: **Joseph Lyman** (Sriram Krishnamoorthi)
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Poster 84: **Brett Crump** (Eric Garland)
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Poster 87: **Stuart Cai** (Ofer Rog)  
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Poster 90: **Justin Tran** (Donna Cross)  
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Poster 91: **Samantha Motta** (Hokulani Aikau)  
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Poster 92: **Austin Buttars** (Ed Rubin)  
Department of Linguistics  
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Poster 92: **Stacie Chadwick** (Ed Rubin)  
Department of Linguistics  
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Poster 92: **Devon Hoxer** (Ed Rubin)  
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Poster 92:  **Shadow Miller** (Ed Rubin)
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Poster 94:  **Zane Gerber** (Gail Zasowski)
Department of Physics & Astronomy
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Poster 95:  **Galen Bergsten** (Gail Zasowski)
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