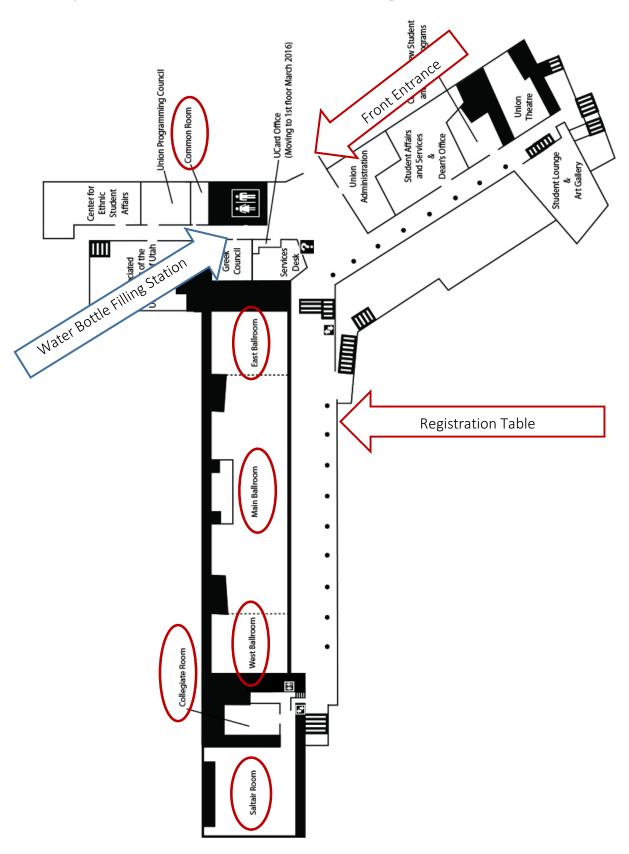
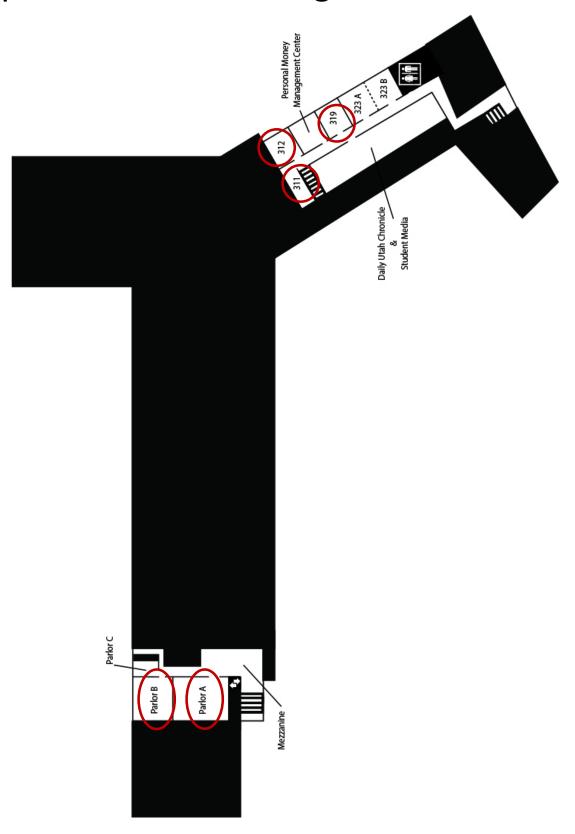
# UCUR 2016 Schedule & Program



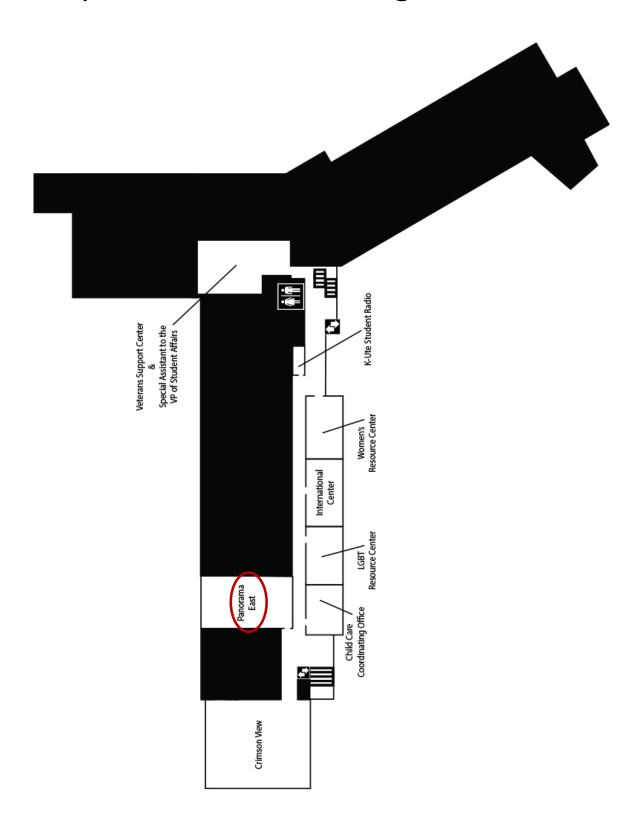
# Map of the Union Building Level 2



# Map of the Union Building Level 3



# Map of the Union Building Level 4



## **UCUR 2016 SCHEDULE**

						Rooms
		5.11	o !: :			throughout
8:00 AM	Corridor Check-In	Ballroom	Saltair	Collegiate Room	Common Room	Union Bldg.
8:30 AM	8:00 AM - 1:00PM	Breakfast available for purchase on Union lower level				
9:00 AM		<b>Welcome</b> 9:00 AM - 9:20 AM				
9:30 AM						
10:00 AM			<b>Poster Session I</b> 9:30 AM - 10:50 AM	<b>Oral Session I</b> 9:30 AM - 10:45 AM	<b>Oral Session I</b> 9:30 AM - 10:45 AM	<b>Oral Session I</b> 9:30 AM - 10:45 AM
10:30 AM						
11:00 AM		Keynote				
11:30 AM		11:00 AM - 11:40 AM				
12:00 PM		<b>Lunch</b> 11:50 AM - 1:50 PM	Poster Session II		Steering Committee Lunch Meeting	
12:30 PM		11.30 AW 1.30 W	11:50 AM - 1:10 PM		12:00 PM - 12:50 PM	Oral Session II
1:00 PM				Preparing for Graduate School 1:00 PM - 2:00 PM		12:30PM - 2:30PM
1:30 PM				David Kieda Donna White Graduate School		
2:00 PM						
2:30 PM				Preparing for Medical School 2:30 PM - 3:30 PM		
3:00 PM			Poster Session III 2:40 PM - 4:00 PM	Benjamin Chan School of Medicine	Oral Session III 2:40 PM - 4:40 PM	Oral Session III 2:40 PM - 4:40 PM
3:30 PM		<b>Snacks</b> 3:30 PM - 4:30 PM				
4:00 PM						
4:30 PM						

Thank you for coming - please travel safely!

## **UCUR 2016 PROGRAM**

- Check-in Corridor, 8:00 AM 1:00 PM
   Please make sure to check-in to get your name tag, lunch ticket, and UCUR 2016 water bottle.
- Welcome Ballroom, 9:00 AM 9:20 AM
   Presented by Office of Undergraduate Research Director Rachel Hayes-Harb and Associate
   Vice President for Research Cynthia Furse
- Keynote Address Ballroom, 11:00 AM 11:40 AM
- Lunch –Ballroom, 11:50 AM 1:50 PM
  Please bring your lunch ticket with you to the Ballroom, pick up your lunch, and enjoy!
- Steering Committee Lunch Meeting Common Room 12:00 PM 12:50 PM
- Breakout Session: Preparing for Graduate School Collegiate Room, 1:00 PM 2:00 PM Presented by Dean David Kieda and Associate Dean Donna White of the Graduate School In this session you will learn about how to prepare for graduate school, including how to translate your undergraduate research experience into graduate school applications. This session will be helpful to any student intending to apply to graduate school in the next year or so.
- Breakout Session: Preparing for Medical School Collegiate Room, 2:30 PM 3:30 PM
   *Presented by Professor Benjamin Chan of the School of Medicine* In this session you will learn about how to prepare for medical school, including how to translate your undergraduate research experience into medical school applications. This session will be helpful to any student intending to apply to medical school in the next year or so.
- Oral Session I Union Bldg, 9:30 AM 10:45 AM
- Oral Session II Union Bldg, 12:30 PM 2:30 PM
- Oral Session III Union Bldg, 2:40 PM 4:40 PM
- Poster Session I Saltair, 9:30 AM 10:50 AM
- Poster Session II Saltair, 11:50 AM 1:10 PM
- Poster Session III Saltair, 2:40 PM 4:00 PM

Room 311 Biological Sciences & Medicine

Moderator: Andrew Merryweather (Mechanical Engineering)

9:30	Avani Latchireddi (University of Utah); Wade Mather; Joseph Tonna	Improvement of Care in Surgical Intensive Care Unit Through Family Feedback
9:45	Nicole Burnett (University of Utah)	A Framework for Validating Modeled Air Quality Data in Health Research
10:00	Christine L Fiscer (Dixie State University); Dannelle Larsen-Rife; Jeremy Scritchfeild; Desiree Irvine; Craig Demke; Lyndsey Craig; Barbara Tortella Balbas; RonJai Staton	Seen But Not Heard: Coercion in Labor and Delivery
10:15	Katie Robinson (Utah State University)	Synthesizing and transcribing RNA for Crystallization
10:30	Alec M Judd (Brigham Young University)	The effect of gut microbiota on starvation resistance in Drosophila melanogaster

### Room 312 Social Sciences, Humanities & Education

Moderator: Larry Bench (Sociology)

9:30	Hadley Hege (University of Utah)	A Proposal for Legislation: How To Reduce Recidivism Rates Among Utah Female Offenders
9:45	Zack Oldroyd (Utah State University)	An Ethical Analysis of the Early Drug War Rhetoric
10:00	Marissa Shirley (Utah State University)	May Swenson: The Development of a Legacy
10:15	Mariko Azuma (University of Utah)	The Effects of Re-contextualization on Vernacular Architecture: Yin Yu Tang House
10:30	Casey Susan Koldewyn (University of Utah); Vic Schiffman; Adriana Haws; Shaylee Tulane	Group-Strength vs. Individual Effort

Room 319 Biological Sciences & Medicine Moderator: Jon Groot (Exercise & Sport Science)

9:30	Karen de la Cruz (Brigham Young University); Kaeli Thomas	Title: Anemia Research in Africa: Interpreting Unexpected Results
9:45	Jacob Lee Dangerfield (Brigham Young University)	Tissue Engineered Vascular Graft for Surgical Implantation
10:00	Corinne Penrod (Brigham Young University)	MAGNAMWAR - Mono-Associated Gnotobiotic Animal Meta-Genome Wide Association R Package
10:15	Jerry Bounsanga (University of Utah); Maren W Voss; Anthony B Crum; Man Hung	Medicare Part B Utilization and Payment: A National Study of Family Practice Providers
10:30	Christopher Reynolds (Southern Utah University)	Phosphatidylserine-containing Supported Lipid Bilayer as a Separation Medium for Copper Binding Compounds

<u>Ballroom East</u> Social Sciences, Humanities & Education Moderator: Martine Green-Rogers (Theatre)

9:30	Deven R Jennings (Brigham Young University)	PTSD In the Veteran Population: An Education Simulation for Nursing Students
	Nicholas Nelson (Brigham Young University); Patrick Stockdale;	Learning Gains from Recurring "Teach and Question" Homework Assignment in an
9:45	Michelle Baek; Katie Fairholm; Clint Morris; Nicole Rice; Shannon Rose; Kurt Williams; Elizabeth G. Bailey;	Introductory Biology Course for Non-Majors: Utilizing Reciprocal Peer Tutoring Outside of Class
10:00	Lauren Michelle Bray (Utah Valley University); Camron Robinson	Consistency of Values, Beliefs and Actions
10:15	Brett Whitney (Utah State University); Mason Lefler; Lindi Andreasen; Brian Belland; Nam Ju Kim; Andrew Walker	A meta-analysis of computer-based scaffolding in sub-domains of mathematics and science
10:30	Hannah Winward (Utah State University)	Benefit Corporations: A New Take on Capitalism

Ballroom West Social Sciences, Humanities & Education

Moderator: Jennifer Seagrave (LEAP)

9:30	Colby Townsend (University of Utah)	The Use of Scripture in 1 Enoch 1-36
9:45	Sam Quinn Passey (Dixie State University)	Creating A Monster: Attachment Theory in Mary Shelly Frankenstein
10:00	Jordan Sgro (Brigham Young University)	Effects of frequent marital communication and decision-making on psychological outcomes: A study of older adults
10:15	Lyndsey Katherine Craig (Dixie State University); Christy Fiscer; RonJai Staton; Michelle Hammon; Deborah M Decker; Jeramy Schritchfield; Sam Passey; Barbara Tortella Balbas; Amy Harmon; Dannelle Larsen-Rife	I Want You to Want Me: Attachment and Pornography Use in Relationship Satisfaction
10:30	Morgan Kirk (Dixie State University)	Utilzing Black Mentors at Predominatley White insitutions providing a sense of belonging to Black students at Dixie State University.

<u>Collegiate Room</u> Engineering, Math & Physical Science Moderator: Erich Petersen (Geology & Geophysics)

9:30	Brett Dagan Pielstick (Brigham Young University)	Vertical Axis Turbine Wake Interaction
9:45	Jonathan Whittier Boyle (University of Utah); Gordon Thomson; Gabriel Madigan; JiHee Kim	Characterization of the Atmosphere above the Telescope Array using the MDFD 2010 Data Set
10:00	Alex Jafek (Brigham Young University)	Human Power Energy Harnessing: A Systems Engineering Approach
10:15	Steven David Wood (Utah State University); Wade H Goodridge; Benjamin James Call	Spatial Ability Training in Statics
10:30	Mackenzie Alice Simper (University of Utah)	The Bak-Sneppen Model of Biological Evolution

<u>Common Room</u> Biological Sciences & Medicine

Moderator: Barbara Wirostko (Ophthalmology & Visual Sciences)

9:30	Fei Wang (University of Utah)	In vitro evaluation of silver nanoparticles to treat acute sinusitis
9:45	David Bennion (University of Utah)	Validation of Force Pedals for Bilateral Strength Deficiency Testing
10:00	Zachary A. Coffman (Utah Valley University); Nicole Cowan; Timothy E. Doyle	Phantom Results Strongly Correlate to a 73- Patient High-Frequency Ultrasound Study of Breast Cancer Surgical Margins
10:15	Joshua Allen Peterson (Brigham Young University); Jason Donald Kenealey	Effect of Resveratrol Derivatives on PMCA in Breast Cancer
10:30	Mark Rigby (Brigham Young University); Jonathan Jacobs; Keaton Karlinsey; Tyler Brown	Nerve Growth Factor Increases Repair of Crushed Peripheral Nerves

## <u>Panorama Room</u> Social Sciences, Humanities & Education

Moderator: Trafton Drew (Psychology)

9:30	Jackie Hobson (Utah Valley	Weight Management Differences Between
9:30	University); Christopher Anderson	Emerging Adults and Adults
	Dohra Fotheringham (Utah Valley	Battling Boredom during the Utah War:
9:45	Debra Fotheringham (Utah Valley	Entertainment in Camp Floyd and Fairfield,
	University)	1858-1861
10:00	Kalsay latter (Divis State University)	The Liminal Gutter: The Literary Impact of
10.00	Kelsey Jetter (Dixie State University)	Memoir Graphic Novels
10:15	Michael Timo Hoggard (Utah State	Barriers to Health Care Access for the Cache
10.13	University)	County Refugee Population
	Mathew Cameron Walker (Weber	Transforming Utah: Focusing on How
10:30	State University); Kylee Hallows;	Transgender Persons Negotiate Their
	Colleen Packer	Identities

<u>Parlor A</u> Biological Sciences & Medicine Moderator: Chatherine Sherwin (Pediatrics)

9:30	Kyle Olsen (Brigham Young University); John Chaston	Effects of Host Microbiota on Intestinal Fiber Content
9:45	Coral Gardner (Southern Utah University)	Revision of Colossendeis colossea Wilson, 1881 (Pycnogonida: Family Colossendeidae)
10:00	Kent Christian Johnson (Westminster College); William A. Deutschman	Determination of Sugar Metabolism Profiles for Non-Traditional Brewing Yeasts of the Genus Brettanomyces
10:15	Tanner Ravsten (Brigham Young University); William Pitt; Neal Bangerter; Chris Wagstaff; Jessica Doud; Clara Gleason	Bio-orthogonal Metastatic Cancer Imaging in Gels
10:30	Whitney Nicole Hansen (Southern Utah University); Chris Monson; Mason Valentine; Cameron Cooper	Supportive Lipid Bilayer Stripping via Microfluidics

<u>Parlor B</u> Social Sciences, Humanities & Education Moderator: Liz Taylor (Undergraduate Studies)

9:30	Elizabeth Gamarra (University of Utah)	Resettlement experiences of children who entered the United States as refugees
9:45	Man Hung (University of Utah); Anthony B Crum; Jerry Bounsanga; Maren W Voss; Wei Chen; Wendy C Birmingham	Trends of depression across regions in the United States
10:00	Hannah Ellen Hendrickson (University of Utah)	Improving Health Outcomes for People Facing Homelessness
10:15	Lisa Echols (Brigham Young University)	Health System Learning: Understanding Performance Improvement in Nursing Education
10:30	Monica Scott (University of Utah); Akiko Kamimura; Lenora Olson	Experiences of Immigrant Women Who Applied for Violence Against Women Act (VAWA) self-petition: Analysis of Legal Affidavits

Room 311 Engineering, Math & Physical Science

Moderator: Inese Ivans (Physics & Astronomy)

12:30	Hailey Hanson (Weber State University)	The Use of Lighter-Than-Air, and Wind- Powered Airfoil Platforms to Take Aerial Photography
12:45	Taylor Max Welker (Brigham Young University)	Study of the Meniscus of Water at the Nanofluidic Level
1:00	Rebecca Loren Maedgen (Southern Utah University)	Evaluation of the Stereochemical Selectivity of the Nucleophilic Addition Reactions of the Menthylmagnesium Chloride Grignard Reagent with Electrophiles
1:15	Loren Atwood (Brigham Young University)	Applying Chemical Reactions to Calculations of Atmospheric Dispersion of a Toxic Chemical in Air
1:30	Troy Joseph Raen (University of Utah); Benjamin Bromley; Anil Seth	Predicting Orbital Properties of High Velocity Stars Near the Galactic Center
1:45	Shawn M LeBaron (Brigham Young University); Sarah Fletcher; Adin Martineau; Benjamin Hilton; Anton E Bowden; David T Fullwood	A Wearable Piezoresistive Interface to Virtual Reality
2:00	Michael Zhao (University of Utah)	Optimization of a Logo Recognition System
2:15	Andrew Orme (Brigham Young University); Isaac Chelladurai; Devin Adams; David Fullwood; Michael Miles	Data Mining Approach to Revising MG AZ31 Twin Formation Models

#### Room 312 Biological Sciences & Medicine

Moderator: Stacy Manwaring (Communication Sciences & Disorders)

12:30	Christopher Mansfield (Westminster College); Frank Black	Environmental Influences of Methylmercury Photo-Degradation Rates at the Great Salt Lake
12:45	David Walton (Brigham Young University); Harper Christensen	Treatment of Diabetic Peripheral Neuropathy by Lysophosphatidylcholine and Nerve Growth Factor
1:00	Lacey Miller Eden (Brigham Young University); Janelle Macintosh; Karlen Elizabeth Luthy; Kailey Jo Hawkins; Emily Mather	NICU Immunization Rates - No Baby Left Behind
1:15	Arthur Adaon Castleton (Brigham Young University); Donnie Feifer; Kaitlyn Johnson; Brady Vance; Michael George Stewart; Ryan Joseph Goodman; Matthew Zimmerman; Joseph Bloxham; Alonzo David Cook	Differentiation of iPSCs into cardiomyocytes utilizing extracellular matrix
1:30	Morgan D Homan (Brigham Young University); Jeff G Edwards; Zoie Badura; Roxanne Miller; Tyler Hammond; Myriah Lewis; Jacob Welch	Running Exercise Mitigates the Negative Consequences of Stress on Hippocampal LTP
1:45	Nicole Cowan (Utah Valley University); Zachary A. Coffman; Robyn K. Omer; Benjamin Finch; Timothy E. Doyle	Micro-Tumor Detectability Studies using Histology Mimicking Phantoms: Evaluating the Sensitivity of High-Frequency Ultrasound to Breast Cancer
2:00	Chandler Warr (Brigham Young University)	Pancreatic Beta Cell Organoids from Induced Pluripotent Stem Cells

Room 319 Social Sciences, Humanities & Education

Moderator: Claudia Geist (Sociology)

12:30	McKade Alton Christensen (Dixie State University); Nancy Ross	Emotional Hooks: The impact of photography in the media
12:45	Jacob Leo Boothe (Utah Valley University)	Socrates and the Dionysian Abyss
1:00	Cynthia Chen (University of Utah)	Examining the Use of Exoticism as Pedagogy in Schumann's Album for the Young
1:15	Avenel Kaitlyn Rolfsen (Westminster College)	People on the Periphery: The Situation of Jewish Women in North Africa during World War II
1:30	Janelle Gherasim (Utah Valley University)	GEOCHEMICAL AND SOCIOLOGICAL STUDY OF BACKYARD WELLS AND GARDENS IN UTAH VALLEY, UTAH
1:45	Holly Reynolds (University of Utah)	Gay Families in the 1950s: "Don't we Count?"
2:00	Jerry Bounsanga (University of Utah); Man Hung; Maren W Voss; Anthony B Crum; Wei Chen; Wendy C Birmingham	The influence of social support on health outcomes in the older population

Ballroom East Biological Sciences & Medicine

Moderator: Lisa Joss-Moore (Pediatrics)

12:30	Kailey Goodman (Brigham Young University)	International Nursing Student Collaboration: Finland and U.S.
12:45	James David Broadbent (Brigham Young University)	Elucidation of Mechanisms Whereby Embryonic Chicken Limbs Develop
1:00	Emma DeLoughery (Westminster College); Brian Avery; Thomas DeLoughery	A retrospective study of the pro-coagulants rFVIIa, 4-factor PCC, and a rFVIIa and 3-factor PCC cocktail in improving bleeding outcomes in the warfarin and non-warfarin patient
1:15	James Tang Zhao (University of Utah)	Lung Setd8 mRNA Expression Peaks During Alveolar Formation in the Rat
1:30	Tyler Robert Augenstein (Brigham Young University); Brent Nielsen	The Role of a Single Stranded Binding Protein in Plant Mitochondrial and Chloroplast DNA Replication
1:45	Collin D Hansen (Brigham Young University)	Insights into Human Diseases with Plant Mitochondria
2:00	Jeremy V Scritchfield (Dixie State University); Dannelle Larsen-Rife; Haley Anderson; Christine Fiscer; Lyndsey Craig; Barbara Tortella Balbas; Ronjai Z. Staton	More Than a Feeling: An Evaluation of Pitocin Use in Obstetrics
2:15	Brianne Palmer (Utah State University)	How's your Aspen? Assessing the Variance in Stomatal Size and Frequency among Cytotypes of Quaking Aspen

Ballroom West Social Sciences, Humanities & Education

Moderator: Casey Hemmis (Biochemistry)

12:30	Paul Dishman (Utah Valley University);	Using Eye-Tracking to Understand Efficacy of
12.50	Brandon I Reas	Digital and Static Outdoor Advertisements
12:45	Patrick Clemens Stewart (University of	A Real-World Investigation of the Attentional
12:45	Utah)	Capture Paradigm
	Elizabeth Appelarrand (Utah Valley	Words and World-View in Feminist Thought:
1:00	Elizabeth Anne Jarrard (Utah Valley	How Religion Informs Women's Internal
	University)	Dialogue.
1:15	Erica Michelle Hawvermale (Utah State	Sense of Community in High School
1.15	University)	Extracurricular Activities
	Amy Harmon (Dixie State University);	
1:30	Sam Passey; Lyndsey Craig; Jeremy V.	Stress and Coping: PlayBased Therapy in
1.50	Scritchfield; Christine Fiscer; Dannelle	Hospitalized Children
	Larsen-Rife	
1:45	Heather Karns (Dixie State University)	Atticus the Segregationist
2:00	Madeline Fowers Baum (Utah Valley University)	Russia's Imitation Act through Don Quixote

<u>Panorama Room</u> Social Sciences, Humanities & Education Moderator: James Curry (Political Science)

12:30	Lacy Ann Bentley (Utah Valley	Female Early Childhood Pornography
12.50	University); Cameron John	Exposure: An Exploration and Comparison
12:45	   Patrick Lynch (Dixie State University)	An Application of Joseph Campbell's
12.45	Patrick Lyrich (Dixie State Onliversity)	Monomyth to non-Western European Myths
1:00	Millie Tullis (Utah State University)	Sylvia Plath: A Study in Adolescent Influences
1.15	F '1 C' 1 (11 : '1 C' 11 1)	Do Children Affect an Abused Parent's Choice
1:15	Emily Stephens (University of Utah)	to Seek Treatment?
1:30	Joshua David Halsey (Utah Valley	(Dis)Ability and Homosexuality: Exploring the
1.50	University)	Rhetoric of Non-Normative Identities
1:45	Nathan Edward Porter (University of	The Best of Both Habits: John Stuart Mill,
1.43	Utah)	William Wordsworth, and the Power of Poetry
		Empowerment Through Body Ownership:
2:00	Bethany L Gull (Utah Valley University)	Experiences of Disaffiliating and Formerly
		Mormon Women
2:15	Kira Kika Lian (University of Utah)	Barriers to Adequate Healthcare for Trans and
2.15	Kira Kiko Lian (University of Utah)	Gender Nonconforming People

Parlor A Social Sciences, Humanities & Education

Moderator: Jenna Kirchgasler (Study Abroad)

12:30	Zack Oldroyd (Utah State University); Courtney Flint; Phillip Andre Valle; Alexander Brown; Charles Mascher; Elizabeth Wynn	Utah Water Voices
12:45	James McGraw (Utah Valley University)	The Read-a-Difference Fellowship: A pilot study on childhood motivation to read
1:00	James Holden Brimhall (Brigham Young University); Kelsie Pead; Leslie Miles; Linda Mabey; Julie Valentine	Prevalence and Impact of Sexual Assault on those with Mental Illness: A Retrospective Study
1:15	Jon Westover (Utah Valley University); Sean Costello	Examining Leadership of the Global Millennial Generation in the Workplace
1:30	Angela Platt (Utah Valley University); Cheryl Hanewicz	Learner-centered Teaching in Online Technology Class
1:45	Thora Elisebeth Lieby Moore (Dixie State University)	Dracula, the Gothic Gospel
2:00	Susanne Arlette Crawford (Dixie State University)	William Tyndale's Translation of the Bible and Its Effect on the English Language
2:15	Bailee Christiansen (Dixie State University)	The B is Silent: The Portrayal of Bisexuality in Buffy the Vampire Slayer

Parlor B Social Sciences, Humanities & Education

Moderator: Aaron Kaplan (Linguistics)

12:30	Jacob Leo Boothe (Utah Valley University)	Monomyth Mountain: Hans Castorp and the Hero Quest
12:45	Renee Delcambre (Utah State University)	Domestic Violence in Mass Media: An Analysis of Messages, Images, & Meanings in Motion Pictures
1:00	Hillary Hermansen (University of Utah)	Male Mediators of Feminine Subjects: Translation in Clarice Lispector
1:15	Mykel Loren Brinkerhoff (University of Utah)	Reanalyzing "Backward" Gemination in Italian
1:30	Jackson Link (Westminster College); Andy Wilson	The Interaction Between Temperament, Skill and Blaming in Online Video Games
1:45	Anastasia Najarian (University of Utah); Raymond Kesner; Jeanine Stefanucci	Treating Dual Diagnosis by Addressing the Genesis of Self-Sabotage
2:00	Jonathan B Frehner (Southern Utah University)	Availability of information on federal aid and a student's enrollment
2:15	Satenik Cherbechyan (Utah State University)	The Ethics of Global vs. Domestic Charity: The Case of Cotopaxi

End of Oral Session II

Room 311 Biological Sciences & Medicine

Moderator: Melinda Angus-Hill (Internal Medicine)

2:40	Alysha Marie Scheeler (University of Utah); Nitin Phadnis	Identifying the genes that contribute to hybrid male sterility in D. pseudoobscura
2:55	Naveen Rathi (University of Utah); Bruce Gale	Testing of a Microfluidic Device for Cell Separation
3:10	Kaitlyn Johnson (Brigham Young University)	Does a Heart Build Itself? A study in cardiomyocyte cell differentiation
3:25	Lindsey Shaw (Brigham Young University)	Health System Learning: Understanding Performance Improvement in a Post-Surgery Hospital Unit
3:40	Alessandro Perego (Brigham Young University)	Fabrication of Dye Sensitized Solar Cells Using Native and Non-Native Nanocrystals in Ferritin
3:55	Donald Earl Pfeifer (Brigham Young University)	Efficacy of autologous fibrin glue in adult stem cell adherence to decellularized porcine scaffold
4:10	Abdulrahman Sulaiman Almasoudi (Utah Valley University)	How project ASL can change the way of rescuing in the EMS field
4:25	Mena Davidson (Westminster College); Christy Clay; Julianna Jimreivat; Daniel Goodman	Crop Pest Communities Along an Urban Gradient

Room 312 Social Sciences, Humanities & Education Moderator: Christie Toth (Writing & Rhetoric Studies)

2:40	Mike McNeil (Brigham Young University); Gaye Ray	Simulation Increases Understanding of Poverty in Future Healthcare Providers
2:55	Bret John Nielson (Utah State University)	Sexual-Spiritual Development: An Integration Process of Homosexuality and Spirituality among Non-Heterosexual Latter-day Saint Men in Mixed-Orientation Marriages
3:10	Preston Stratford (Utah Valley University)	Using the development of problem solving and teamwork skills as predictors of student retention and course completion in science course.
3:25	Christina Summers (Weber State University); John Silito	Utah's UFOs: An Alien Viewpoint
3:40	Colby Townsend (University of Utah)	The Yahwist's Influence on the Book of Mormon
3:55	Lacy Bentley (Utah Valley University); Scott May; Malisa Brooks; Dr. Kristine Doty	Comparing the Adjustment Patterns Between Early Returned LDS Missionaries and Full-term Missionaries
4:10	Katie Fronk (Southern Utah University)	Exploring the Aftermath of Massacres and the Attitudes of the Individuals Involved
4:25	Camilynne Basile (Dixie State University)	Shifting Teacher Identity in the Culturally Responsive Classroom

Room 319 Engineering, Math & Physical Science

Moderator: Don Wardell (Operations & Information Science)

2:40	Bryce Taylor Ingersoll (Brigham Young University)	UAV Path-Planning Optimization using Bezier Curves and a Receding Horizon Approach
2:55	Jason David Ray (Brigham Young University); Kyle Kener; Ben Bitner; Brent Wright; Matthew Ballard; Justin Bosley; Larry Moss	What Does the Fos Say?
3:10	Lindi Andreasen (Utah State University); Nam Ju Kim; Brian Belland; Mason Lefler; Andrew Walker	Meta-analysis Comparison of Computer- based Scaffolding Targeting Individuals versus Groups in Complex Problem Solving
3:25	Michael Farnsworth (Brigham Young University)	Origami   imagirO: Numerical Solutions of Apparent Absorptivity in Origami Folds
3:40	Shelby Lynn Larsen (Brigham Young University)	Feasibility Study of Technology for Increasing Sustainability at Airports
3:55	Roger Chu (Brigham Young University); Tom Wall; Aaron Hawkins	Changes in Light Guiding Capacity of PECVD Waveguides Due to Environmental Exposure
4:10	Bryant Lo Re (Westminster College); Will Deutschman	Decreasing ethanol production in Saccharomyces cerevisiae through mutagenesis of alcohol dehydrogenase enzyme
4:25	Jason Hamner (Utah Valley University); Curtis Welborn	RDBMS Construction with Secondary Indices

#### Ballroom East Social Sciences, Humanities & Education

Moderator: Jill Shea (Surgery)

2:40	Cinimin Kofford (Utah Valley University)	A Weekend in the Wild: The Effects of Nature
2.40	Cililinii Konora (Otah Valley Offiversity)	on Creativity
2:55	James McGraw (Utah Valley	Exploring Perfectionism and Latter-day Saint
2.55	University); Zachary Pope	Religiosity
	Kristine Bowser (University of Utah);	Community Engaged Learning: An Essential
3:10	Trieste Palmer; Alexa Pazell; Alexa	Part of Gender Studies and Social Science
	Adams; Leni Solis; Elizabeth Pitman	Curricula
	Sage Elizabeth Williams (Brigham	Council Associate Findings from a Detroop sating
3:25	Young University); Kelsie Pead; Elise	Sexual Assault: Findings from a Retrospective
	Otteson; Julie Valentine	Chart Review of 1000 Victims

Ballroom West Biological Sciences & Medicine

Moderator: Mia Hashibe (Family & preventive Medicine)

2:40	Kaitlin Ann Jackman (Brigham Young University); James E. Kohl	Vitamin D Deficiency in Collegiate Athletes, A Comparative Study Between Indoor and Outdoor Athletes at Brigham Young University
2:55	Amber D Bowler (University of Utah); Thomas O'Hare; Michael Deininger; Nadeem Vellore; Anthony Pomicter; Matthew Zabriskie	Improving inhibitor selectivity in non-small cell lung cancer in never-smokers through computational model guided screening
3:10	Amy LaFond (Utah Valley University); Caitlin Carter; Robyn Omen; Timothy Doyle	High Frequency Ultrasound (20-80 MHZ) for Analyzing Breast Cancer Surgical Margins and Lymph Node: A 73 Patient Surgical Study
3:25	Bruce Larson (Brigham Young University)	Optimization of decellularization of whole porcine kidneys
3:40	Jeffrey Chad Mecham (Brigham Young University)	Resveratrol as a Chemotherapeutic
3:55	Daniel T Hansen (University of Utah)	Structural analysis of the human BAP1:HCF-1 interaction
	Yuji Chen (University of Utah); Mia Hashibe; Yuan-Chin Amy Lee; Shuang Li; Zuo-Feng Zhang; Min Dai; Qian Li; Chien-jen Chen; Wan-Lun Hsu; Pen-	
4:10	Jen Lou; Cairong Zhu; Jian Pan; Hongbing Shen; Hongxia Ma; Lin Cai; He; Yu Wang; Xiaoyan Zhou; Qinghai Ji; Baosen Zhou; Wei Wu; Jie Ma; Paolo Boffetta	Body mass index and risk of head and neck cancer

<u>Common Room</u> Biological Sciences & Medicine Moderator: Bellamkonda Kishore (Internal Medicine)

2:40	Andrea Cutler (Brigham Young	Optimization of Auto-induction media for Cell
2.40	University); Christina Muhlestein	growth used in Cell-Free Protein Synthesis
2:55	Jaclyn Johns (Brigham Young	Antibacterial Carbon-Infiltrated Carbon
2.33	University)	Nanotube Coatings on Surgical Blades
3:10	Melinda Koyle (Brigham Young	The Effect of Microbiota on Lifespan in
5.10	University)	Drosophila melanogaster
3:25	Caitlin Carter (Utah Valley University);	Cytoskeletal properties of cell cultures using
5.25	Amy Fairbrother; Ashley Behan	high-frequency ultrasound
3:40	Alistair Hilton (Brigham Young	Visualization of cardiac plexus fiber branches to
	University); Adam Jorgensen; H.	the atrioventricular valves using the Sihler's
	Wayne Lambert; David A. Morton;	technique.
	Jonathan J. Wisco	·
		Preferential Breakpoints in the Recovery of
3:55	Hunter James Hill (University of Utah)	Broken Dicentric Chromosomes in Drosophila
		melanogaster
4:10	Kyle Bitter Kener (Brigham Young	Defining the role of Nr4a3 in B-cell function
7.10	University); Jeffery Sivert Tessem	benning the role of Midds in B cell function
	Austin Sidwell Gamblin (University of	Standing postural sway and balance confidence
4:25	Utah); Hina Garg; Leland E Dibble;	in persons with Multiple Sclerosis at fall-risk as
	Eduard Gappmaier	compared to controls

<u>Parlor A</u> Biological Sciences & Medicine

Moderator: David Belnap (Biology)

2:40	Bodrie J Jensen (Southern Utah University); Matthew Weeg; Mary Jo Tufte; Skyler Buck; Jeremy Osborne	The effects of Umbellularia californica produced terpenoids on vascular smooth muscle.
2:55	Josh Nole Schmidt (Westminster College)	Comparison and Trends of Mercury Concentrations in Brine Flies and Spiders at the Great Salt Lake
3:10	Robyn Kira Omer (Utah Valley University); Timothy E Doyle	Detecting malignant tissue during breast cancer surgery with high-frequency ultrasound: Results from a 17-patient study

End of Oral Session III

Poster 1	Jess Esplin (University of Utah) CAPITAL ACCOUNT LIBERALIZATION & INCOME INEQUALITY: 1980-2009
Poster 2	Viviane Smita Baji (Utah State University) Impact of Age on Water Shortage Concern
Poster 3	Chad Skidmore (Utah State University) Genetic modification of E coli for resveratrol biosynthesis
Poster 4	Allison Dee Garner (Brigham Young University); Sam A Hardy Parent's Roles in Adolescent Pornography Use
Poster 5	Elizabeth G Bailey (Brigham Young University); Michelle Baek; Shannon Rose Katie Fairholm; Clint Morris; Nicholas Nelson; Nicole Rice; Patrick Stockdale; Kurt Williams In-Class Participation Gender Gaps in Upper-Level Life Sciences Courses
Poster 6	Katie Merten (Utah Valley University); Mark Christiansen; Eric Hadley; Marissa Keck; Jacob Siebach Laboratory Test of the Theoretical Foundation of the Accelerated Erosion Model for Arsenic Contamination of Groundwater
Poster 7	<b>Taylor Heinzlmeir (Brigham Young University)</b> Acute methamphetamine induces reactive oxygen species formation in dopamine terminals of the nucleus accumbens
Poster 8	Kevin Shurtleff (Utah Valley University); Colin Manitoken; Preston Eyre Novel, Low-cost, Solar Thermal, Phase Change, Air Compressor for Clean, Sustainable, Renewable Electricity Generation
Poster 9	Jordan Kamuela Okalani Risley (Utah State University) The Impact of Farm Ties on Concern for Climate Change
Poster 10	Hanna Larsen (University of Utah) Identification of Components of Visual Circuits Within the Cerebral Cortex of Primates
Poster 11	Kathryn Lami (University of Utah)  Dynamic Autophagy in the Insulin Resistant Heart
Poster 12	Brent Jackson Wright (Brigham Young University); Jeffery Tessem B-cell Mitochondrial Respiration Changes in Aged Islets

Poster 13	Erin Kaseda (Brigham Young University); Jordan Sgro; Adriane Cavallini; Kiley Ballew; Spencer Nielson; Kristen Ray; Chris Herron; Kyle Eversole; Katie Hyatt; Wendy C. Birmingham Personal susceptibility to media influence: Body satisfaction in sub-clinical women
Poster 14	Scott Gary Frodsham (Brigham Young University) Statistical Analysis of Multiple Sclerosis Patient Electronic Health Record Data in Correlating Liver Damage in Response to Interferon Beta Treatments
Poster 15	Anna Brandes (University of Utah); Yue Zhang; Simon Robson; Bellamkonda Kishore Effect of a High-Fat Diet on Transgenic Mice Overexpressing Human CD39
Poster 16	Jacob Grant Robinson (Utah Valley University); T. Heath Ogden Phylogeny of Ameletopsidae (Ephemeroptera - Mayflies): Carnivores of the Southern Hemisphere
Poster 17	Robby Bowles (University of Utah); Bryton Davis; Niloofar Farhang Use of CRISPR genome-editing technology to promote osteogenic differentiation in human adipose-derived mesenchymal stem cells (hAD-MSCs)
Poster 18	Brett Denney (Westminster College); Edgar Chavez; Bonnie Baxter DNA Detection in Salt
Poster 19	Jace R Melessa (Dixie State University); Darren Stapleton; Carol Fordham; Alaura Young; Rico Del Sesto Synthesizing Your Future
Poster 20	Joshua Thomas Blotter (Utah State University); Chris Fawson How has the Affordable Care Act impacted the implementation of telehealth programs in isolated rural areas?
Poster 21	Arthur Wallis (Utah State University); Robyn Smith; Karen Beard Does the Diet of the Coqui Frog Change Over the Course of the Day?
Poster 22	Dan Jones (Westminster College) Photoprotective Adaptations of Halophilic Archaea
Poster 23	Danielle Christensen (Utah State University) Trauma and Touch: Apprehension of Touch in Survivors of Military Sexual

Trauma

Poster 24	<b>Lindsay Arslanian (University of Utah)</b> Mental Health and Injuries In Older Adults -Factors Associated with Increased Risk
Poster 25	Tyler Steadman Murphy (Brigham Young University); Amy Crandall; Makensie Louw; Merrick Reynolds; Drew Bernhisel; Chad Hancock Metformin Limits Loss of Mitochondrial Respiration Seen With Doxorubicin Treatment Without Affecting Muscle Function
Poster 26	Kacey Gao (University of Utah); David Page; Gregory Clark Tactile Stimulation Device for Training Human Amputees to Recognize Activation of Different Sensory Afferents during Utah Slanted Electrode Array Stimulation
Poster 27	Danni Katherine Petersen (Utah Valley University); Ron J Hammond Quitting and Well-being Among Utah Firefighters
Poster 28	Sarah Hendricks (Dixie State University) Implicit Racial Bias and Memory: The Effects of Racial Salience on Jurors Memory
Poster 29	Melissa Mossar (University of Utah); Mikaelyn Kooyman INCORPORATING HEALTH LITERACY PRINCIPLES INTO COMMUNITY HEALTH NURSING
Poster 30	Hannah Peterson (Utah Valley University) Temporal and Spatial Variations of Trace Metal Loading to Utah Lake
Poster 31	John Lin (University of Utah); Byron Eng; Arlyn Andrews; Logan Mitchell; Ryan Bares; Derek Mallia; Kirk Thoning; Daniel Mendoza Investigating Methane Emissions in the Salt Lake Valley: An Atmospheric Inverse Study
Poster 32	MiKayla Stokes (Dixie State University); Bryan James Adam We Rise and Fall Together: A Study of the Relationship between hTR and hMRP
Poster 33	Matthew Horn (Utah Valley University); Zach Pierson; Michael Rhees; Brett Jackson; Jeffery Keller; Erika Martinez; Dallin Ollerton; Ethan Rowbury; Victor Warr; Alexander Whatcott; Damaris Zarco Gonzalez; Heather Wilson-

Problem Solving Skill Development in a Guided Inquiry Environment

Ashworth

Poster 34	The Relationship Between Preschoolers' Engagement in Book Reading and Executive Functioning Skills
Poster 35	Jenny Adele Pattison (Brigham Young University) The role of PAS kinase in controlling cellular respiration
Poster 36	<b>Benjamin Orson Jack (Brigham Young University)</b> The role of KLF14 in the survival and proliferation of pancreatic B-cells
Poster 37	Jonathan Bennion Whitaker (University of Utah) Verification of C++ Programs
Poster 38	Hunter Levis (University of Utah) CRISPR-Based Sequence-Specific Endongenous Down-Regulation to Drive Osteogenesis in Adipose-Derived Stem Cells
Poster 39	Shannon McGillivray (Weber State University); Parker Hughes; Tahne Vongsavath; Tyson Bryant Self-Compassion and its Effects on Physical Pain Response
Poster 40	Randy Luke Klabacka (Brigham Young University) Phylogeny and species boundaries in the "flying dragons" of the Draco maculatus species complex (family Agamidae)
Poster 41	Alexis Payne Suggs (University of Utah) Passive Cooling Strategies For Utah
Poster 42	
Poster 43	
Poster 44	Bailee Dee Bird (Utah State University) Antibiotics in Our Own Backyard
Poster 45	Philip Charles Simon (University of Utah) A Study of Optimized Loading of Thermoacoustic Stirling Heat Engines

Poster 46	John Stuart Peterson (University of Utah); Jingye Yang; Amiee Maxwell; Adam Cohen; Sunil Sharma; Howard Colman Combined targeted Inhibition of STAT3 and the epigenetic regulator LSD1 alters proliferation and molcular phenotype in glioblastoma tumor stem-like cells
Poster 47	Daniel Robert Lathen (Brigham Young University) B-cell Adaptation to Elevated Palmitate Concentrations (Hyperlipidemia)
Poster 48	Rachel Gardner (Brigham Young University) From Information Teleportation to Energy Teleportation
Poster 49	Josh Smith (Utah State University); Megan Hansen; Ryan Yonk Women and Economic Freedom
Poster 50	Dustin Miller (Utah Valley University); T. Heath Ogden Parameletus columbiae Genome (Ephemeroptera)
Poster 51	Allison Kay Morin (Brigham Young University); Caleb Cornaby; Brian Poole Lytic Genes Influence the Production of Infectious Epstein-Barr Virus
Poster 52	Everett S. Barnes (University of Utah) Remodeling of Gap Junction Distribution in Cardiac Myocytes in the Infarct Border Zone
Poster 53	Chris D Anderson (Brigham Young University); Kevin M Farley; Nathan J Ricks; Mikel R Stevens  Development and Classification of SSRs for Penstemon scariosus (Plantaginaceae)
Poster 54	Galen Muske (Westminster College); Bonnie Baxter Microbial Diversity of Culinary Salts
Poster 55	Stephanie Boudreaux (Brigham Young University); Megan McGhie; Rachael Claire Poore; Ryan Stewart Seed Germination Study of Yucca Species
Poster 56	Hannah N Wagner (Utah State University) Roles of TRIL in Nodal signaling during Xenopus development
Poster 57	Brianna Alejandra Kindall (University of Utah); Rob MacLeod; Jess Tate Computer Simulation of Electrocardiograms for Arrhythmia Diagnosis

Poster 58	Margaret Carlson (University of Utah); Akiko Kamimura Perceptions of Violence Against Women Among College Students in the US, Japan, India, Vietnam, and China
Poster 59	William Bradford York (Utah Valley University) Developing a High-Resolution Melt Assay to Identify Mosquito Blood Meals
Poster 60	Hannah B Waddel (Brigham Young University); Nicholas Nelson; Arminda Suli Transcription factor interactions in developing hair cells
Poster 61	Matthew Steven Miller (University of Utah) ESCRT-III and MIT domain containing Interactions
Poster 62	Joshua Jordan Hansen (Brigham Young University); Collin J Sanderson; Alonzo Cook Characterization of Proliferation and Dedifferentiation of Muller Cells
Poster 63	Kurt Williams (Brigham Young University); Nicole Rice; Michelle Baek; Nicholas Nelson; Shannon Rose; Patrick Stockdale; Elizabeth G Bailey Effect of Cumulative vs. Non-cumulative Assessments on Student Learning in ar Introductory Biology Course
Poster 64	Caroline Jia Wang (University of Utah) Treatment of Osteomyelitis Using Locally Administered Vancomycin in an Invivo Rat Model
Poster 65	Joshua LeBaron McArthur (Dixie State University); Jeremy Scritchfield; Haley Anderson; Rico DelSesto; Danelle Larsen-Rife Investigation the degradation products and impurities in Pitocin
Poster 66	John Doyle (University of Utah) The Influence of El Niì±o on marine mammal abundance and human habitation of coastal Baja California, Mexico: Evidence from Abrigo de los Escorpiones.
Poster 67	Marli Stevens (University of Utah); Tom Cova Margin of Licensed Dog and Cat Populations and Adoptions from Animal Shelters in Utah Counties in 2013-2014
Poster 68	Michael Evan Roberts (Brigham Young University); Bradley Geary Epilobium angustifolium's Endophytic Fungi and their Biologically Active

Poster 69	Mercedes Robinson (University of Utah) Professional vs. Nonprofessional Exercise Prescriptions and Injury Correlation
Poster 70	<b>Kyler J. Haskell (Brigham Young University)</b> Frequency and Characterization of Staphylococcus aureus and MRSA in raw meat samples in the Utah County Area
Poster 71	Joshua Kurtis Brown (Utah Valley University); Brynna Mikae Boettcher; Camille Knaphus; Claudia Lieberwirth Transforming the Classroom: Can the Use of Technology Function as a Learning Tool
Poster 72	Jessica Rochelle Harris (Utah Valley University) Embryo optimization of Ocimum basilicum using kinetin
Poster 73	Cedric Shaskey (University of Utah) Near-Field Thermoreflectance Thermomemtry
Poster 74	Joseph Oliver White (Brigham Young University); Jeralyn Franson; Andrew Rees; Alistair Hilton; Kai Li Ong; Nidhi Choksi; Jared Resolme; Jeffrey Zhao; Laura Bridgewater; Julianne Grose PAS Kinase and its Role in the Development of Diabetes and Obesity in Mice
Poster 75	Chloe P Young (University of Utah); Wayne K Potts Host sex plays a role in virulence and transmission dynamics of friend virus complex in wild-derived mice
Poster 76	Vera Mayhew (Brigham Young University); Caleb Cornaby; Wesley Cheney; Brian Douglas Poole EBI2 expression pattern is controlled in response to EBV infection, putatively controlling immune-evasive migration of B cells in lymph nodes
Poster 77	David Usevitch (Brigham Young University) Finite Element Analysis of Novel Compliant Mechanism Spinal Clamp
Poster 78	Caitlynn Cooper (Brigham Young University); Brendon Warner Using CRISPR/Cas9 knock-in technology to endogenously label RibeyeA protein

in the zebrafish model organism

Poster 79 Annwin Chen (University of Utah)

The Human Microbiome

Poster 80 Nicolas N Brown (University of Utah); Andrew S Merryweather; John Lilquist;

**Ross Imburgia** 

Innovative Engineering to Improve the Quality of Life for Individuals with High

Level Spinal Cord Injury

End of Poster Session I

Poster 1	Christine Henry (University of Utah); Kelly Hughes THE STUDY OF THE INTERACTION OF FLIG AND H-NS IN SALMONELLA
	TYPHIMURIUM
Poster 2	Matthew Horn (Utah Valley University); Michael Rhees; Brett Jackson; Jeffrey Keller; Erika Martinez; Dallin Ollerton; Zachary Pierson; Michael Rhees; Ethan
	Rowbury; Victor Warr; Alexander Whatcott; Damaris Zarco Gonzalez; Heather

Teamwork Skill Development in a Guided Inquiry Environment

#### Poster 3 Jamie Kingsford (Utah State University)

Characterization of the Shigella flexneri Type Three Secretion System (T3SS) ATPase Spa47

#### Poster 4 Bridget L Larsen (Weber State University)

Purposeful Living

Wilson-Ashworth

#### Poster 5 Austin King Fackler (Dixie State University); Dustin Duke Reidhead; Gabriela

Chilom

The effect of self-assembly of organic matter on the water repellency of soils

## Poster 6 Ashli Hunter (Utah State University); Deanna Larson; Sumira Phatak; Abby Benninghoff

Dietary supplementation with tart cherries for prevention of inflammationassociated colorectal cancer in mice

#### Poster 7 Alexa Brooks (University of Utah); Alexa Doig; Robert Durrant; JoAnn Fenn

Survey of Microbiology Education in Nursing

#### Poster 8 Ethan Powell (University of Utah); Ethan Powell

The Role of Reversibility in the Self-assembly of DNA-Coated Colloids

#### Poster 9 Shannon McGillivray (Weber State University); Emma Mark; Preston L.

Bradley; David Sleight; Monika Sahleen; McKenna Hansen

Introverts and Extroverts Physiological and Behavioral Responses to Aggression

#### Poster 10 Sarah Nguyen (Brigham Young University)

The Effect of Students' Emotional Maturity on Their Perception of Test Question Fairness: an fMRI Study

#### Poster 11 Will Howard (University of Utah); C David Whiteman

Soluble Pollutant Concentrations in Fog Water during a Cold Air Pool in the Salt Lake Valley

Poster 12	Adrian Shimpi (University of Utah); Tara Deans Introduction of the Q System into Mammalian Synthetic Biology
Poster 13	Justin Heath Crandall (Brigham Young University); Kiara Vaden; Kelly Scott Weber; Kim O'Neill Sequencing an antibody specific for an epitope overexpressed on cancer cells
Poster 14	Terry James Lee (Brigham Young University); Dr. Stephen Piccolo Predicting Cancer Patient Survival by Analyzing Clinical and Molecular Data using a Machine-learning Approach
Poster 15	Kent Williams (Brigham Young University); Anton E. Bowden; Brian D. Jensen; Tracy W. Nelson Analysis of catalysts to carbon nanotube growth on medical-grade stainless steel
Poster 16	Hiu Yu Tang (Dixie State University) The effect of physical attraction and employment decision
Poster 17	Jordan Sgro (Brigham Young University); Erin Kaseda; Adriane Cavallini; Kiley Ballew; Spencer Nielson; Kristen Ray; Chris Herron; Kyle Eversole; Katie Hyatt; Wendy C. Birmingham "Relationship quality and body image: Can supportive spouses make a difference?"
Poster 18	Nicholas James Warren (University of Utah); Akiko Kamimura; Ha Ngoc Trinh; Emily Stephens; Keita Omi; Ana Kanaoka; Ai Ishikawa; Katsuo Yamanaka Perceptions of Aging and Disability among College Students in Japan
Poster 19	Rakael D Hinton (Southern Utah University) Comparison and Contrast of The Navajo Dine Bahane' and Bible Creation Stories
Poster 20	Tuscan Thompson (University of Utah); Steven L. Alam; Wesley I. Sundquist Interactions between PPxY Motifs in AMOT and WW Domains in NEDD4L Function in Viral Budding
Poster 21	Amanda Cecilia Howa (Westminster College); Han Kim; Fernando Rivero Where Fantasy Meets Reality: Commercial Sex Work in the 21st Century

Poster 22	Ryan Roberts (Utah Valley University); Chris Anderson; Ron Hammond Accuracy in Predicting Personal BMI Category Among College Students
Poster 23	Cortney Holmes (Brigham Young University); Taalyn Rasmussen; Angelo Garcia Combination Selenium Therapy in early stage Prostate Cancer cells
Poster 24	Stephanie Dale Bair (Brigham Young University) NMDA AND GABAA RECEPTOR-MEDIATED PLASTICITY IN THE VENTRAL TEGMENTAL AREA BY ACUTE AND CHRONIC ETHANOL
Poster 25	Elizabeth Vargis (Utah State University); Harshit Singh; Lori Caldwell; Jennifer Ban; Randy Lewis Optimizing the Growth of Retinal Epithelial Cells
Poster 26	Ben Berger (University of Utah); Marta W. Szulik; Bethany A. Buck-Koehntop Biophysical Characterization of DNA Interactions by the Methyl-CpG Binding Protein Kaiso
Poster 27	Yudi Glen Medrano (Utah Valley University); Chris Tingey; Olga Kopp Organogenesis Studies in Thai Pepper
Poster 28	Brooke Lofthouse (Utah State University) Contradictory Conservation Policies on the Upper Snake River
Poster 29	Courtney Nordgran (Brigham Young University) Two-Phase Flow over Superhydrophobic Surfaces
Poster 30	Hassan Al Quraish (Weber State University) The George Wahlen Veterans Home Renovation
Poster 31	Gaia Jonelle Nafziger (Utah State University); Jennifer Reeve; Mae Culumber; Brent Black Statistical analysis of organic non-chemical weed controls on peach tree fruit yield
Poster 32	Bryson Carrier (Utah Valley University); T. Heath Ogden Phylogenetic Relationships of Mayfly Family Baetidae (Ephemeroptera)

Poster 33	Camila Esposito (University of Utah); Jill Shea; Hannah Beal; Courtney Scaife
	Axl Inhibitors for the Treatment of Pancreatic Ductal Adenocarcinoma

#### Poster 34 Kristopher Pedersen (Utah State University)

Management for Game Species can Positively Impact Reptiles and Amphibians in Artificial Wetlands.

#### Poster 35 Carmen Darinka Zapata (Utah Valley University)

HRM-PCR Analysis of Mosquito Blood Meals to Identify Blood Source

#### Poster 36 Haoran Yu (University of Utah)

How do nuclear scientists and engineers talk internally among themselves about the Fukushima energy crisis?

#### Poster 37 Robert Chase Spencer (Utah State University); Ashley Lynn Ruben; Brianne

**Eileen Bell; Craig Soelberg; Thomas Harris; Dan Gil; Randolph V. Lewis**ARAKNIPRINT: 3D Printing of Synthetic Spider Silk to Produce Biocompatible and Resorbable Biomaterials

#### Poster 38 Sean M Christensen (Utah State University)

Survey of Plant Diseases and Pests in Utah Raspberries

#### Poster 39 Ben Merrill (Brigham Young University)

AUXIN-INDUCED PROTEIN DEGRADATION IN ZEBRAFISH

#### Poster 40 Mckenzie Rose Barry (Dixie State University); Erica Briseno; Donald Warner;

**Curt Walker** 

Does a combination of high heat, high ultraviolet (UV) rays, and low humidity disable chytrid fungus in the lab?

#### Poster 41 Diego Arnoldo Garrido (University of Utah); Michael Hoehn

FOREFRONT: Leading Collaborative Architectural Practice

#### Poster 42 Wyatt Zagorec-Marks (University of Utah)

Understanding Dynamic Motions Involved in the Photocycle of Photoactive Yellow Protein

#### Poster 43 Camille Harmer (Utah State University); Devin Stein

Fighting Fire with Fire

Poster 44	Samuel George Grover (Brigham Young University) The role of betatrophin in the B-cell proliferation pathway
Poster 45	Samantha Chadwick (University of Utah); Brent Young; Ning Tian Mapping the Synaptic Connections of Retinal Ganglion Cells
	Acute and Chronic Effects of Selenium on the Brine Shrimp Artemia franciscan
Poster 48	Ben Posch (University of Utah) Guided Wave Environmental Compensation with Big Data Sets
Poster 49	Wade Eric Mather (University of Utah) Extracorporeal Membrane Oxygenation
Poster 50	Ming Gao (University of Utah) Ultrasensitive Magnetometer Simulations using COMSOL
Poster 51	Melissa Mossar (University of Utah) RECRUITMENT OF ETHNICALLY DIVERSE POPULATIONS IN DIABETES RESEARCH
Poster 52	Ashlee Danielle Burton (University of Utah) Characterizing the Biochemical Requirements for the TRP Precursor of the bps Signal
Poster 53	Amanda Hobson (Brigham Young University) Overexpression of HDAC1 induces functional B-cell mass
Poster 54	Samantha R Beck (Utah Valley University); Heather Mathison; Toma Todorov An in depth review of the phytochemistry and ethnopharmacology of Tridax procumbens
Poster 55	Jolene Marie Hess (University of Utah) Climate Change Influence on Plant Phenology
Poster 56	Scott Lyle (Utah State University); Michael Castle Optimization of Phenol-Formaldehyde Resins with Bio-oil and Amino Acid Residues
Poster 57	Michael Scott Rodgers (Weber State University)  A Study of Sexual Orientation Discrimination in Utah

Poster 58 Sydney Rose Wyatt (University of Utah); Shelley Macneil; Mumtahena Rahman; Gajendra Shrestha; Samuel Brady; Jasmine Rethmeyer; Andrea Bild Predicting drug response in breast cancer using multi-pathway gene expression signatures and BH3 profiling. Poster 59 Kevin Shurtleff (Utah Valley University); Ryan Bernal; Christian Fullmer Waste and Cost Reduction by Reprocessing Used Motor Oil into a Synthetic Diesel Fuel Poster 60 Christian White Daniels (Brigham Young University); Bradford Berges Hamsters Expected to Produce a Better Immune System than Mice Poster 61 Jane Bashford (Weber State University) George E. Wahlen Veterans Home- A Community Poster 62 Alexander Jones (University of Utah) Regulation of Zyxin with Altered Hemodynamics in the Developing Chick Heart Poster 63 **Karsten Arthur Eastman (Utah Valley University)** Novel Organic Compound Synthesis to Impact NF-kB and STAT3 Pathways Poster 64 Jonathan Greenhalgh (University of Utah) Study of Proton Pumping by Incorporation of a Genetically Encoded Infrared Probe Poster 65 Parker Hinckley Holzer (University of Utah) Chemical Compositions of Planet-Harboring Stars in M67 Poster 66 **Zachary James Sadler (Brigham Young University)** Energy from Thin Air: Compressed Air Power Harvesting Systems Poster 67 Avenel Kaitlyn Rolfsen (Westminster College); Ashleigh Albrechtsen The Tomb of François de Halluin Poster 68 Jonathan Mortensen (Brigham Young University) Low-Cost Hydrogen Microprint Technique and identification of microstructures in Advanced High Strength Steels that are susceptible to Hydrogen Embrittlement

#### Poster 69 Conner Earl (Brigham Young University)

Ribonuclease inhibitors for In Vitro Biology

#### Poster 70 Joseph Le Nguyen (Brigham Young University); Gerald Watt; John Harb; Randy

Lewis

Use of methyl and monomethyl viologens as catalysts in the production of hydrogen from glucose for the use in hydrogen fuel cells and as electron carriers in glucose fuel cells

#### Poster 71 Ashleigh Brinkerhoff (Dixie State University)

Somatic Symptom Disorder in DSM-5: Misdiagnosing Biological Causations of Mental Illness and Devaluing the Functionality of Pain

#### Poster 72 Hayley Lynn Tomney (Weber State University); Pamela B. Payne

Stakeholder Perception of K-12 Education Mission Fulfillment: An evaluation of DaVinci Academy

#### Poster 73 Anna Irene Guyer (Brigham Young University)

How Well Can Machine-learning Algorithms Predict Biomedical Outcomes Based on Gene-expression Data?

#### Poster 74 Brett Cutler (University of Utah); Jie Shi Chua; Kuberan Balagurunathan;

**Anandh Babu Pon Velayutham** 

Blueberry metabolites at physiological relevant concentrations do not affect angiogenesis in human aortic endothelial cells.

#### Poster 75 John Fisher (University of Utah)

**Energy Recovery from Pressure Retarded Osmosis** 

#### Poster 76 Andy Renz (University of Utah)

Assessment of exercise-stimulated tissue oxygenation in calf muscle with functional MRI

## Poster 77 Mitchell Blanc (Brigham Young University); Rydge Mulford; Matthew Jones;

**Brain Iverson** 

Visualization and Control of Radiative Surface Properties using Origami Inspired Surfaces

#### Poster 78 Kent Taylor Dean (Utah State University); Courtney Flint

Stakeholder Perceptions on Values and Vulnerabilities in Wasatch Mountain Communities

Poster 79 Danni Katherine Petersen (Utah Valley University); Chris Anderson; Ryan

**Roberts; Ron J Hammond** 

Effects of Latter Day Saint missions on weight

Poster 80 Candace Beata Ross (Weber State University)

Return with Honor Veterans Home

Poster 81 Victoria Willard (Dixie State University)

A Scientific Study Determining Variables Affecting Metal Oxide Oxidation States

Coloring High Fire Ceramic Art Glazes.

End of Poster Session II

Poster 1	Kristina Danielle Lundgren (University of Utah); Brandon Day Cold Temperature Performance of Phase Change Material Based Battery Thermal Management System
Poster 2	Alex Jay Hyer (University of Utah); William Brazelton Temporal Changes in Microbial Composition and Activity in Serpentinization- Driven Ecosystems
Poster 3	Robert Hitchcock (University of Utah); Johanna Day de Gennaro; Tanner Coleman; Nadia Hamad; Janet Shaw; Ingrid Nygaard Analysis of Intra-Abdominal Pressure in Women during Exercise
Poster 4	Matthew J Barnett (Utah State University) DOES WATER-BASED OUTDOOR RECREATION HAVE AN IMPACT ON THE ENVIRONMENTAL PERCEPTIONS AND CONCERNS OF UTAHNS?
Poster 5	Brian Isom (Utah State University) Dammed if you do: Solving Utah's water problem
Poster 6	Jadyn Naylor (Utah State University); Jacob Caldwell; Michael Jensen Energy Regulations and Economic Recovery from the Great Recession
Poster 7	Jeppesen Garcia Feliciano (University of Utah)  Development of computational strategies for improved environmental simulations of water and energy balances, air quality, and building energy use
Poster 8	Emily Dart (University of Utah) Microbial Communities and Metabolic Potential in Sites of Continental Serpentinization
Poster 9	Allison Kate Hadley (Southern Utah University); Mandy Jo Nelson; Chris Monson Making CSI Dreams a Reality: Microfluidic DNA and Small Molecule Analysis
Poster 10	Emily Orr (Utah State University); Riley Michaelsen; Boston Peine; Logan Hemmert Student Development Pipeline - Strata Case Study
Poster 11	Cassie Shurie Demke (Dixie State University); John Pugliese Applied Behavioral Analysis Intervention: Improving the Social Functions of

Patients with Dementia

Poster 12	Ting-yi Vicky Liao (Utah Valley University); Ron Hammond Using Self-Reported Negative Emotions to Predict Key Health and Weight Measures Among College Student
Poster 13	Renae Elizabeth Higginson (Utah Valley University); Ryan Roberts; Jackie Hobson; Chris Anderson Weight Gain and Gender Differences in the "Freshman Fifteen"
Poster 14	Tyler McDaniel (University of Utah) Utah's Pathways to Higher Education: A Quantitative Analysis
Poster 15	<b>Dietrich Geisler (University of Utah)</b> Integrating Floating-Point Values into the Boogie and SMACK Languages
Poster 16	Sarah Harrison (Brigham Young University); Bryson Ensign Interspecific Hybrids in Penstemon
Poster 17	Isaac Bowen (Weber State University); Craig Oberg; Michele Culumber Determination of treatments to reduce late gassy defect in cheese due to Lactobacillus wasatchensis contamination
Poster 18	Christian DaLon Esplin (Brigham Young University); Brian Jensen; Anton Bowden; Nicholas Whipple Superhydrophobic and Anti-Microbial CICNT Surfaces
Poster 19	Julie Imig (University of Utah); Inese Ivans; Deric Session The Milky Way's Neighbor: Chemical composition of ultra-faint dwarf galaxy Bootes I
Poster 20	Hansel Halverson (University of Utah) Evaluation lab-scale plug loads
Poster 21	Kiley Ballew (Brigham Young University); Jordan Sgro; Erin Kaseda; Adriane Cavallini; Spencer Nielson; Kristen Ray; Chris Herron; Kyle Eversole; Katie Hyatt; Wendy C. Birmingham Religiosity may not predict better body image: a study in sub-clinical women
Poster 22	Shirley Luo (University of Utah); Hee-Kyoung Lee; Barbara Wirostko Hyaluronan-based sustained delivery of Besifloxacin to the eyes

Poster 23	Ishaah Talker (Utah Valley University); T. Heath Ogden Phylogeny of Mayfly Subfamily Ecdyonurinae (Heptageniidae: Ephemeroptera)
Poster 24	Matt Blanchard (Dixie State University) Interaction of lipids with natural surfactants from soil
Poster 25	Gregory Alan Mohl (Brigham Young University); Mckay Jensen; Spencer Wallentine; Kelly McGuire; Roger Harrison; David Busath Mitigating the Risks of Emerging Highly Pathogenic Influenza Pandemics
Poster 26	Dustin Reidhead (Dixie State University); Austin Fackler; Gabriela Chilom Characterization of Mineral Soil Samples: Surfactant Composition
Poster 27	Camille McKae Migliori (Dixie State University); Kahla Merrett; Aimee Newsham; Alaura Young; Jace Melessa; Darren Stapleton; Carol Fordham; Jospeh Aklinski; Don Warner; Andrew Koppisch; Dan Fox; Rico Del Sesto Synthesis of topical antimicrobial materials based on room-temperature ionic liquids
Poster 28	Jordan Sgro (Brigham Young University); Emily Hartung; Wendy Birmingham; McKenzie Carlisle Effects of Spousal Attitudes on Own Exercise Behavior
Poster 29	<b>Kyle Eversole (Brigham Young University)</b> Spousal Influence on Health Behavioral Practices in Young Couples
Poster 30	John Philip Garrett (Weber State University) Mobile Elemental Power Plant II (MEPP II) Research Project
Poster 31	Sheldon James Myers (Brigham Young University) Engineering High Affinity Class II TCRs Specific to Listeria Monocytogenes
Poster 32	withdrawn
Poster 33	Aaron E Palmer (Dixie State University) Cursed Fathers: Trauma Theory and Link, the Hero of Time
Poster 34	withdrawn

Poster 35	Benjamin Felt Bitner (Brigham Young University); Tommy Rowley; Matt Ballard; Justin Bosley; Jeffery Tessem Determining the Mechanism of Cocoa-Derived Epicatechin Enhancement of Glucose Stimulated Insulin Secretion
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Art, Ecology and the Politics of Land Use

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