



15th Annual
**UNDERGRADUATE
RESEARCH CONFERENCE**

A Symposium of Scholarly Works & Creative Projects

**CONFERENCE
SCHEDULE**

For full program with
abstracts, please scan
the QR code



CONFERENCE-AT-A-GLANCE

8:00-3:00 pm: Conference presenters and all guests sign-in
Jordan Student Success Building (JSSB)

8:30 – 9:45 am: CONFERENCE SESSION I

Oral Presentations – JSSSB

Room 200 Room 203
Room 205

10:00 – 11:15 am: CONFERENCE SESSION II

Oral Presentations – JSSB

Room 200 Room 203
Room 205

Poster Presentations – JSSB

Mezzanine / 1st Floor

11:30 am: Lunch in Tivoli Turnhalle

11:45 am: Keynote: Dr. Karen Z. Naufel

1:15 – 2:00 pm:

CONFERENCE SESSION III

Oral Presentations – JSSB

Room 200 Room 203
Room 205

Poster Presentations – JSSB

Mezzanine / 1st Floor

2:45 – 4:00 pm:

CONFERENCE SESSION IV

Poster Presentations – JSSB

Mezzanine / 1st Floor



Jordan Student Success Building (JSSB): Presentations

Tivoli Student Union: Lunch

ORAL PRESENTATION SCHEDULE

ORAL PRESENTATION, SESSION I: 8:30 AM – 9:45 AM

JSSB Room 200: Natural Sciences

Time	Name	Major	Title	Mentor
8:30 am	Silver Hull, Elliana Ortiz, Tayler Arnold	Biology	Alpine Black Flies of the Continental Divide	Robert Hancock
8:45 am	Quinn Pedrick	Biology and Environmental Science	Silent but Friendly: A Story of the Bioaccumulation of Trace Elements in Urban Moss	Erin Bissell
9:00 am	Skylar Stefonowicz	Biology	Gene-Environment Interaction in Pregnancy: PRKAA1 and Uterine Blood Flow at Altitude	Colleen Julian
9:15 am	Paris N. Cook	Anthropology	Pyla-Koutsopetria Archaeological Project: Discoveries from EUs 24 & 30	Justin Stephens, Brandon Olson
9:30 am	Angelica Galstyan	Anthropology	Cultural Commodities: A Study of Exchange and Ethics in the Antiquities Market	Rebecca Forgash

JSSB Room 203: Psychological Sciences

8:30 am	Elise Midcap, Maria Mondragon, Daniel Niewiarowicz, Averie Mclain, Elias Pike	Nursing	Parents' Evaluations of Parenting Advice Generated by AI, Experts, or Family and Friends in Social-Emotional Contexts	Bethany Fleck Dillen, Cynthia Erickson
8:45 am	Angelina Djibilova	Psychology	Masked Bias: How Professionalism Standards and Microaggressions Impact the Well-being and Self-Efficacy of Counseling Students of Color	Jovan Hernandez
9:00 am	Ezra Toledo	Psychology and Gender, Women, and Sexualities	Nuances in Online Dating: Transgender and Gender Expansive Online Dating Behavior	Chad Mortensen
9:15 am	London X. Rollins	Psychology	Psychosocial Predictors of Essential Oil Use and Conventional Treatment Substitution in University Students	Katherine G. Hill
9:30 am	Kirsten Zeitler, Erin Carrillo	Psychology, Human Development, and Family Studies	Attitudes Toward Adventurous Play	Kristen Lyons

JSSB Room 205: Hospitality / Linguistics / English / Music /Criminal Justice

8:30 am	Alyssa Thornton	Hospitality Leadership	Building Consumer Trust in Short-Term Rentals: A Literature Review on Factors Influencing Consumer Booking Motivations and Trust Formation	Kiyan Shafieizadeh
8:45 am	Noah Steinbrecher	Linguistics	Tracing the sources of /k/ /dz/ with comparative and loanword data	Samuel Beer
9:00 am	Maria Medina Santellanes, Myles Larrick, Jordan Gertner	English	How the MSU Writing Center could better serve ESOL students	Elizabeth Kleinfeld
9:15 am	Enzo Albert	Music	Music Therapy and Music Medicine in Healthcare	Elizabeth Macy
9:30 am	Annalyse J. Bastres	Criminal Justice and Criminology	Through Their Eyes: Child Victims of Sexual Exploitation and Trafficking- A Case Study of Born into Brothels	Jennifer Cheek

ORAL PRESENTATION SESSION, II: 10:00 AM – 11:15 PM

JSSB Room 200: Art / Communication Design

Time	Name	Major	Title	Mentor
10:00 am	Jess Gerome	Art Education	Visits to the Void	Rachael Delanay, Anne Yoncha, Jill Mollenhauer, Natascha Seideneck
10:15 am	Alejandra J. Contreras	Fine Arts	Now Do You See Me?	Marin Abell
10:30 am	Katie Francis Karakourtis	Studio Art	here, now: archiving the ephemeral	Marin Abell
10:45 am	Julio Ramirez	Communication Design	Dark Matter Magazine	Kelly Monaco

JSSB Room 203: Computer Science

10:00 am	Angela Fleenor	Computer Science	Dark Enigma: Indexing the Dark Web to Disrupt Human Trafficking Networks	Steve Beaty, Annjanette Alejano-Steele
10:15 am	Yujin Kim	Computer Science	Explainability Analysis of Retrieval-Driven Behavior in RAG Pipelines	Ranjidha Rajan
10:30 am	Alexio Muzika, Jackson Thomas, Alina Valshchuk	Computer Science	Designing Sustainability Spotlights: A Student-Led Approach to Making Sustainability Data Accessible	Daniel Pittman / Alyssa Williams
10:45 am	Sayo Owolabi	Computer Science	Pricing stock options using random walk simulations	Benjamin Dyhr

JSSB Room 205: Speech, Language & Hearing Sciences / Health Professions

10:00 am	Karalynn Cromack	Speech, Language & Hearing Sciences	Emotional Identification for Pediatric Clients with Expressive Language Difficulties	Marcia Walsh-Aziz
10:15 am	Megean Mayfield	Speech, Language & Hearing Sciences	The Role of Play-Based Therapy and DIR/Floor time in Supporting Communication Development	Marcia Walsh-Aziz
10:30 am	Karis Winston	Speech, Language & Hearing Sciences	Conversation Groups in Gender-Affirming Voice Therapy: Supporting Communication and Identity	Marcia Walsh-Aziz
10:45 am	Yajaira Munoz Delgado	Speech, Language & Hearing Sciences	FUN Sheet- a quick and simple homework sheet	Marcia Walsh-Aziz

ORAL PRESENTATION, SESSION III: 1:15 PM – 2:15 PM

JSSB Room 200: Geology / Geography / Environmental Science

Time	Name	Major	Title	Mentor
1:15 pm	Tom Watson CANCELLED	Applied Geology	Prospecting for Placer Diamonds in the State Line District Using Longwave UV Light	Uwe Kackstaetter
1:30 pm	Noah Cowperthwaite, Ronan Brennan, Libby McGavran	Geography	Rideshare Use Amongst the Blind and Low-Vision Community	Sylvia Brady, Sarah Schliemann
1:45 pm	Kevin E. Morales	Geography	Spatiotemporal Trends in Colorado's Hydrology	Andong Ma
2:00 pm	Rosaelena Cardenas	Environmental Science	Cro	

JSSB Room 203: Mathematics / Physics

1:15 pm	Milo Halpern	Mathematics	An Examination of PragerU Curriculum and its Harms	Janelle Johnson
1:30 pm	Johnny Adams	Mathematics	Near-Peer Observations- Noyce U-R STEM	Janelle Johnson, Daniel Moore
1:45 pm	Caoimhin Perkins	Physics	Measuring The Galactic Bar Angle Using Red Clump Parallax Data from Gaia DR3	Kamran Sahami, Matthew Penny
2:00 pm	Michael Belayneh	Physics	Operational Metaphysical Ethopathology	

POSTER PRESENTATION SCHEDULE

POSTER PRESENTATION, SESSION II: 10:00 AM – 11:15 AM

(Note: There are no poster presentations in Session I)

Jordan Student Success Building - Mezzanine

Poster #	Name	Major	Title	Mentor
1	Tev Cole	Anthropology	Using Metrics of the Fourth Lumbar Vertebrae in Order to Determine Sex in Forensic Cases	Michala Stock
2	Juniper Finch	Anthropology	An Analysis of Artifacts from the Late 19th Century Brothel District in Central City, CO	Jade Luiz
3	Braxton R. Fenton	Applied Geology	Phytoremediation: <i>Lupinus perennis</i> & <i>Lupinus polyphyllus</i> Sequestration of Mercury in Auraria Campus Soil	Uwe Kackstaetter
4	Jessica Swanson	Applied Geology	Trace Metal Analysis at Baker Hot Springs and Red Hill Hot Springs in Central Utah	Uwe Kackstaetter
5	Regan L. Bartow	Biology	Identification of a Novel Non-Fermenting Organism in Tissue Culture	David Merriam
6	Raelyn Begay	Biology	The T-box gene <i>eomesa</i> specifies few sclerotome cells to expand and form the median fin skeleton	James T. Nichols, Vida Melvin
7	Quinn Bell, Kai Cann	Biology	Integrating a Decade of Undergraduate Field Data: Impacts of Prolonged Flooding on Bird and Plant Communities in Chatfield State Park	Erin Bissell
8	Jailene Carrillo	Biology	Function of <i>macc1</i> in Embryonic Development in Zebrafish	Vida Melvin
9	Elena Herrera	Biology	<i>Macc1</i> is Expressed in the Testes and Ovaries of Adult Zebrafish	Vida Melvin
10	Sara Mazur	Biology	The Dive to Survive: The impacts of nutrition on the diving behaviors and buoyancy of <i>Aedes aegypti</i> larvae	Robert Hancock
11	Ashley Johnson, Madeleine Palmgren	Environmental Science	The Dung Beetle Effect on Soil Quality in Daniel's Park	Sarah Schliemann
12	Stephanie McGavran	Geography	Legacy Metal Contamination at Denver's Auraria Campus: Linking Soil Pollution to Historical Land Uses	Sarah Schliemann
13	Kasey Mears	Psychology	Beyond Pet Ownership: How Dimensions of Pet Attachment Predict Stress and Life Satisfaction	Maureen Flynn
14	Abigail Arnove	Psychology	How siblings shared interpretations of major life events shape the support they provide each other in adulthood	K. Scherrer, Emily Kazyak

15	Natalie Blackman	Psychology	Sleep Disturbance as a Mediator Between Social Media Use and Depression in U.S. College Students	Maureen Flynn
16	Benjamin Del Barco, Simon Cheistwer	Psychology	Does Precise Instructional Language Improve Learning Outcomes, Perceived Competence, and Academic Motivation in Undergraduate Students?	Bethany Fleck Dillen
17	LaKrisha Fehringer	Psychology	Legal professionals' understanding of psychological terminology in forensic mental health reports	Cassandra Bailey
18	London X. Rollins	Psychology	Not All AI Anxiety Is Equal: Differential Predictors of AI Attitudes	Maureen Flynn
19	Mickey Schieferecke	Sociology	The Blindness–Mirage Spectrum: A Sociopsychological Model of Reality Alignment	Desire Anastasia
20	Ariella Nadav	Sociology and Geology	Alzheimer's Disease Prevalence and Relationship to Regional Variations in Geochemical Lithium Concentration	Uwe Kackstaetter, Brian O'Hara

POSTER PRESENTATION, SESSION III: 1:15 PM – 2:30 PM

Jordan Student Success Building - Mezzanine

Poster #	Name	Major	Title	Mentor
1	Katie Perry	Art	Developing an automated scanning methodology to quantify microbial motility in mixed culture	Helene Ver Eecke
2	Samuel Michael	Communication Design	Eri	Kelly Monico, Jacqueline McLeod
3	Tori O'Dea	Art	Null Space: An Experimental Faraday Structure for Disconnection	Anne Yoncha, Marin Abell
4	Rex Herlin	Studio Art	Worth my Weight in Woe	Maeve Leslie, Leslie D. Boyd
5	Maze Swainston	Music	Somatic Benefits Across Dance-Based Cultural Rituals	Nicole Predki
6	Karemma Brown	Chemistry	Preparation of the Solid Support for the synthesis of a solid-supported oxidant	Shailesh Ambre
7	Viktoriya Gidenko, Isabel Thomas	Chemistry	Synthesis of a Library of 6-deoxy-Talose-Containing Glycopeptidolipid Oligosaccharides for the Creation of Aptamer-Based Diagnostics	Shailesh Ambre, Andrew Bonham
8	Stian Gilbertson	Chemistry	Towards the Asymmetric Synthesis of Natural & Unnatural Amino Acids using Glycine Methyl Ester Schiff's Bases	Shailesh Ambre,

				Joshua P. Martin
9	Ernesto Saenz-Rascon	Chemistry	Photocatalytic upscaling of methane using Metal/Semiconductor Nanoparticles	Megan Lazorski, S. Ambre, J.P. Martin
10	Erica Scott	Chemistry	Designing and immobilizing solid-supported hypervalent iodine oxidants to enable simple filtration	Megan Lazorski, Shailesh Ambre
11	Cinthia M. Cervantes	Biochemistry	Optimizing a Biochemistry I CURE: A Student-Informed Approach to Course Development, and Course Improvement	Andrew McMillan
12	Kai Cann, Allison Reed, John Rutherford	Biology	The Effect of Offspring Developmental Stage on Parental Aggression in Convict Cichlids (<i>Amatitlania nigrofasciata</i>)	Jennifer Gagliardi-Seeley
13	James Dennis Morfeld, Kim Drexler, Amy Teten	Biology	Understanding the impact of invasive rusty crayfish on community structure in Lake Granby and the Little Thompson River using stable isotope analysis	Jason Koltz
14	Asa Willett	Biology	"No-Till" Composting: Evaluating Biofilm Formation, Water Retention, and Maturation of Aerated Static Pile Compost	David Merriam
15	Angela S. Ortiz et al.	Biology	Restoring CaMKII function in hippocampus and olfactory bulb enables odor association learning in CaMKIIa knockout mice	Daniel Ramirez Gordillo
16	Casey Roberts	Biology	Decanalization of development in <i>ndnf</i> mutant zebrafish	Vida Melvin
17	Nana Akua Adu Owusu, Dean Austin Fraser	Psychology	Introductory Science Courses: What is Happening During Class Time?	Shalini Srinivasan, A. Barun, C. A. Erickson
18	London X. Rollins	Psychology	Measuring Experimental Reasoning in General Biology Laboratory Classes	Johnathon Dyhr, C. A. Erickson, A. Barun
19	Christina M. Speegle	Psychology	Patient-Reported Outcomes of Ketamine Treatment and Ketamine-Assisted Therapy	Katherine Hill
20	Kelly K. Stephens	Psychology	Cannabis Hyperemesis Syndrome: Prevalence and Associations with Cannabis Use Patterns	Katherine Hill
21	Aden Walsh, Eloy Spotted Horse	Psychology	Schizophrenia, Stigma, and Social Media: An Untold Story	Aaron Richmond, Chad Mortensen
22	Leif Kenamond	Psychology	Not All OCD Is Viewed the Same: How Symptom Subtypes Shape Stigma	Maureen Flynn

POSTER PRESENTATION, SESSION IV: 2:45 PM – 4:00 PM

Jordan Student Success Building - Mezzanine

Poster #	Name	Major	Title	Mentor
1	Dawson Lee	Biochemistry	Exploring Barcode Loci for Hawthorn Identification at Red Rocks Park, Colorado	Megan Filbin, Tyler Williams
2	Isabel Thomas, Viktoriya Gidenko	Biochemistry	The Optimization and Synthesis of L-Rhamnopyranose Sugar fragments for the Development of Diagnostic Aptamers	Shailesh Ambre
3	Fernando Urrutia	Biochemistry	Investigating the Structure of Novel Viral Cap-Independent Translation Enhancer Using Selective 2'-Hydroxyl Acylation Analyzed by Primer Extension and Mutational Profiling (SHAPE-MaP)	Megan Filbin
4	Andrea Valencia Espinoza	Biochemistry	Functional Analysis of Mutations in the Cap-Independent Translation Enhancer of Blackcurrant Reversion Virus (BRV)	Megan Filbin
5	Keairra Brown	Chemistry	Lewis Acid and Counterion Effects on the Excited-state Behavior of Mn(IV)-Oxo Complexes	Megan Lazorski, Shailesh Ambre
6	Kattya Gonzalez, Kali Julien	Biology	Optimization growth of <i>Mycobacterium bovis</i> strain Bacillus Calmette-Guérin and RAW 264.7 immortalized murine macrophages with flow cytometry	David Merriam
7	Briana Wagner, Helena Arons	Biology	Antibiotic resistance trends in <i>E. coli</i> from Cherry Creek	Rebecca Ferrell
8	Trinity Taylor, Jael Romo	Biology	Regulation of Neuron Derived Neurotrophic Factor by <i>Bmp</i> and <i>Shh</i> signaling in Zebrafish	Vida Melvin
9	Bella Maher	Biology	Divalent Metal Ion Transporters in Insects	Emily Ragan
10	Laura Patton	Biology	When AI Hears What Isn't There: The Mimicry Problem in Bird Identification	Christy Carello
11	Maritza Gonzalez	Biology	Investigations of species distributions and suspected hybridizations of <i>Cx pipiens</i> and <i>Cx. salinarius</i> along Colorado's front range	Robert Hancock, Vida Melvin
12	ReAnn Jacob, Savannah Verner, Monique Nem	Environmental Science	Have you really looked at your data set lately? Appraising Temperature Taking Methods in Urban Forestry	Erin Bissell
13	Monica Ball	Computer Science	AETHER: Agent Ecosystems for Testing, Hardening, Evaluation and Research of LLM Security and Tool-Based AI Systems	Daniel Pittman, Alyssa Williams

14	Nathan Meiners et al.	Computer Science	Find My Major	Ranjidha Rajan, Mark Yoss
15	Jackson Thomas, Emma Tran, Umulbanin Gulzar	Computer Science	Making Sustainability Data Useful: Student-Built Spotlights in the Sustainability Hub	Daniel Pittman, Alyssa Williams
16	Emily Boyer	Computer Science and Mathematics	amRviz: A framework for visual interpretation of antimicrobial resistance models	Janani Ravi
17	Kyle Pineiro	Computer Science, Data Science and Machine Learning	Investigating Mitotic DNA Synthesis in <i>Saccharomyces cerevisiae</i> by Nascent Nanopore DNA Sequencing	Allison McClure, Samuel R. Greenfield
18	Isabella Eaton	Data Science and Machine Learning	Underrepresented Voices in a Colorado Biobank: Perspectives from Focus Groups on Data Sharing	Katrina Claw, Lucas Rozell
19	Ash Blondo	Psychology	Professionally vs. Self-Diagnosed: How Diagnostic Source Impacts Stigma of ADHD	Maureen Flynn
20	Benji Del Barco et al.	Psychology and Human Development and Family studies	Play as a Stress Intervention for Undergraduate Students	Kristen Lyons
21	London X. Rollins	Psychology	Personality Predictors of Attitudes Toward Artificial Intelligence: A Replication Study in U.S. Undergraduates	Maureen Flynn
22	Alissa VanMorter, Eve Chadwick, Rianna Willson	Psychology and Political Science	Navigating a Dual Role: The Parenting Student Experience	Kristen Lyons