



14th Annual

UNDERGRADUATE RESEARCH CONFERENCE

A Symposium of Scholarly Works & Creative Projects

CONFERENCE SCHEDULE

For full program with
abstracts, please scan
the QR code



Graduate Research
& Scholarship Fair
Schedule Included



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 202	Room 205

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

Oral Presentations – JSSB

Room 200	Room 203
Room 202	Room 205

Poster Presentations – JSSB

Mezzanine / 1st Floor

11:30 am: Lunch in Tivoli Turnhalle

11:45 am: Keynote: Dr. Brandon Ogbunu

1:15 – 2:00 pm:

CONFERENCE SESSION III

Oral Presentations – JSSB

Room 200	Room 203
Room 202	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, SESSION I: 8:30 AM – 9:45 AM

JSSB Room 200: Natural Sciences

Moderator: Vida Melvin

Time	Name	Major	Title	Mentor
8:30 am	Reece L. Bailey	Biology	Purple Roof Majesties: Evaluation of <i>Crocus sativus</i> L. on Green Roofs in the Rocky Mountains	Jennifer Boussetot
8:45 am	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
9:00 am	Charlotte Campbell, Lake Harding, Haddel Dahabreh	Biology	Unexpected cohabitants with Rocky Mountain Blackflies: The Discovery of Brilliant Red Alpine Hydras in Colorado	Robert Hancock
9:15 am	Haddel Dahabreh	Biology	Home in the Hollow: Adaptive Behaviors of Neotropical <i>Sabethes</i> Mosquito Larvae in Tree Holes	Robert Hancock

JSSB Room 202: Psychological Sciences / Gender, Women's, and Sexualities Studies

Moderator: Anahi Russo Garrido

8:30 am	Artemis T. Douglas	IDP: Feminist Rhetorical Practices	Real Girls' Talk: Demonstrating Trans Women's Precarity	Anahi Russo Garrido
8:45 am	Julia Sickrey	Psychology	Cognitive Fusion, Resiliency, Sexual Orientation Microaggressions, and Mental Health in LGBTQIA+ Individuals	Jovan Hernandez
9:00 am	Ezra Toledo	Psychology	The Expansion of Gender and Sex; Sociosexual Indexing of Transgender and Gender Expansive People	Chad Mortensen
9:15 am	Amelia Federico	Political Science, Chicana/o/e/x Studies, Sexualities Studies	Queer and Trans interchanges: mutual aid in the U.S. Mexico borderlands	Arlene Sgoutas / Raul Melgoza

JSSB Room 203: Mathematics / Statistical Sciences

Moderator: Shahar Boneh

8:30 am	Licia Lamb	Mathematics	Factorial Frenzy	Diane Davis
8:45 am	Colin Burkhart	Statistical Science	Finding Winning Strategies in Monopoly by Using Markov Chains	Shahar Boneh
9:00 am	Carl Perry	Statistical Science	Are your Dice Cursed? Statistical Modeling for 20 Faceted Dice Defects	Shahar Boneh
9:15 am	Jackson Jurgaitis and Jesus Tena-Sanchez	Statistical Science	A Random Walk Through Gambler's Ruin	Shahar Boneh

JSSB Room 205: Computer Science / Business Intelligence

Moderator: Ranjidha Rajan

8:30 am	Urvi Pal	Business Intelligence	The Future of Business Intelligence: How Data Visualization is Being Redefined by Generative AI	Ranjidha Rajan
8:45 am	David Lee	Computer Information Systems	Unpacking Containers: Building a Custom OCI-Compatible Container Engine	Daniel Haupt
9:00 am	Elicia Perez	Computer Science	Evaluating Dimensionality Reduction Techniques for Social Network Clustering	Ranjidha Rajan
9:15 am	Tristan Speer and Angela Fleenor	Computer Science	Evaluating AI Fairly: A Transparent Framework for Comparing Large Language Models	Daniel Pittman and Alyssa Williams

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

JSSB Room 200: Gender, Women's, and Sexualities Studies				Moderator: Sonny Dhoot
Time	Name	Major	Title	Mentor
10:00 am	Veronica Zepeda	Gender, Women, & Sexualities Studies	Youth Liberation: Understanding Bodily Autonomy and Agency	Sonny Dhoot
10:15 am	Sara Vang	Gender, Women, & Sexualities Studies	Troubling the Model Minority Myth: Hmong Incarceration & Anti-Blackness	Sonny Dhoot
10:30 am	Ale Fontes	Gender, Women, & Sexualities Studies	Chicanx Community Organizing and its Relationship to American Indian Liberation	Zaynab Shahar
10:45 am	Sylas Fox	Gender, Women, & Sexualities Studies	Crip Superpositioning: Disabled Temporal Experience in the (in)Accessible Western Academy	Sonny Dhoot
11:00 am	Hang Pham	Gender, Women, & Sexualities Studies	Disability Decarceration: the death of disabled Asian Americans and Prison Abolition	Sonny Dhoot
JSSB Room 202: Criminal Justice / Geography				Moderator: Sylvia Brady
10:00 am	Katie McGhee	Certificate-GeoInfoSystems-GIS	Does Second Amendment Sanctuary Status and Extreme Risk Protection Orders (Red Flag Gun Laws) in Colorado Impact Firearm Suicide?	Sylvia Brady
10:15 am	Austin Ingham	Criminal Justice	Distribution of electric scooters in Denver that ride on the sidewalk versus paved road	Hyon Namgung
10:30 am	Annalyse J. Bastres	Criminal Justice and Criminology	Victimization and Student's Perception of Administrative Response on a Large Urban Campus	Jennifer Cheek
10:45 am	Jordan Lestenkof, Libby McGavran, Ronan Brennan, Noah Cowperthwaite	Geography	Transportation and Ridesourcing in the Blind and Low Vision (BLV) Community	Sylvia Brady / Sarah Schlieman
JSSB Room 203: Psychological Sciences				Moderator: Sara Jackson Shumate
10:00 am	Diego S. Maldonado Lopez	Psychology	Undocumented Undergraduate College Students: An Examination of College Persistence and Mental Health	Sara Jackson Shumate
10:15 am	Bug Bobitsky	Psychology & Philosophy	Faculty Self-Disclosures: Are Students' Perceptions Impacting Learning?	Cynthia Erickson / Katherine Hill
10:30 am	Kyle Jones	Psychology	Exploring the Role of LMS Interactions with Modules and Academic Success	Bethany Fleck-Dillen
10:45 am	Nana Akua Adu Owusu, Nicholas Miller, Brandon Martinez, Ayden Joshi, Sarah Rones	Psychology	Sense of Belonging Among Students of Different Ethnic Groups in STEM	Cynthia Erickson / Arijana Barun / Shalini Srinivasan
JSSB Room 205: Anthropology / Fine Arts				Moderator: Cynthia Church
10:00 am	Apollo Blue	Anthropology	The Music of the Labor Rights Movement Museum Exhibition	Jade Luiz
10:15 am	Cass Pangell	BA Studio Art and BM Music Composition	AI-Assisted Music Composition: Enhancing Creativity and Performance	David Farrell
10:30 am	Cecilia Jones	Theatre	Life of Ragtime	Alyssa Ridder / Carrie Colten
10:45 am	Yomi Fadeyi	Fine Arts	Unearthed: Black Colorado Revealed	Matthew Jenkins

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

JSSB Room 200: Human Development / Counseling / Public Health / Speech, Language, and Hearing Sciences Moderator: Arlene Sgoutas

Time	Name	Major	Title	Mentor
1:15 pm	Nikola Skurzok	Speech, Language, Hearing Sciences	Low-tech AAC intervention for teens with moderate to high support autism	Marcia Walsh-Aziz
1:30 pm	Reed Pennell, Deanna Bright, Daniel Niewiarowicz	Human Development and Family Studies	Perceptions of Neurodiversity	Chad Mortensen / Aaron Richmond
1:45 pm	Eva Torres	Psychology: Concentration in Clinical and Counseling	Enhancing Writing Center Accessibility: Strategies for neurodiverse students and Staff Development	Elizabeth Kleinfeld
2:00 pm	Bekah McGehee and Julia Stitt	English	Metacognition and constructing learning	Elizabeth Kleinfeld

JSSB Room 202: Geology / Biology / Philosophy Moderator: Erin Bissell

1:15 pm	Mariah Ormsbee	Applied Geology	The Spatial Distribution of Iron Oxides in a Weathered Iron-Nickel Campo Del Cielo Meteorite Fragment.	Uwe Kackstaetter
1:30 pm	Charlie Kirkham	Biology	The Evolution of Cooperation Across Different Biological Scales	Erin Bissell / Caleb Cohoe
1:45 pm	Katie Perry	Biology	Ugly Beautiful Bioremediation: An Artistic Study	Helene Ver Eecke
2:00 pm	Whitney Wygant	Philosophy	Photography and Objects: How the Photography Illustrates the Nature of Aesthetic Properties	Caleb Cohoe

JSSB Room 203: Psychological Sciences Moderator: Cynthia Erickson

1:15 pm	Ayden Joshi, Nicholas Miller, Nana Akua Adu Owusu, Sarah Rones, Brandon Martinez	Psychology	Evaluating the Correlates of Math Anxiety	Cynthia Erickson / Arijana Barun / Shalini Srinivasan
1:30 pm	Averie McLain and Maria Mondragon	Psychology	Expert Evaluation of ChatGPT-Generated Parenting Advice	Bethany Fleck-Dillen
1:45 pm	Julianna Montoya, Alexandra Soto Garcia, Melany Marin Munoz	Public Health	Exploring the Experience and Lessons from National Case Study Competition: An Investigation into Health Disparities in Vulnerable Communities	Garvita Thareja / Erin Seedorf
2:00 pm	Nicholas Miller, Nana Akua Adu Owusu, Ayden Joshi, Sarah Rones, Brandon Martinez	Psychology	Grit score is not correlated with time spent working on anagram problems	Cynthia Erickson / Arijana Barun / Shalini Srinivasan

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	Tristan Bunting / Eden Chavez	Biochemistry	Examining the Effects of MEK and GSK-3 Inhibition on mRNA Methylation in Mouse Embryonic Stem Cells	Christopher Phiel
2	Gage Leach, Lizeth Hernandez, Daniel Gerber	Biochemistry	Investigating Acyl Fluorides as a Potential New Class of SHAPE reagents	Shailesh Ambre / Megan Filbin
3	Isabel Thomas / Ernesto Saenz Rascon	Biochemistry	Synthesis of a Library of Mycobacterial Glycopeptidolipid Fragments for the Development of Aptamer-Based Diagnostic Tools.	Shailesh Ambre / Andrew Bonham
4	Hal Arons	Biology	Microvideography of <i>Sabethes cyaneus</i> Copulation	Robert Hancock
5	Isaiah Bonilla / Haddel Dahabreh	Biology	Predator in the Water: Hunting Prey in a neotropical tree hole as <i>Sabethes</i> Mosquito Larvae	Robert Hancock
6	Brittany Brown	Biology	Breeding Behavior of the Ferruginous Pygmy Owl (<i>Glaucidium brasilianum</i>) in Costa Rica	Christy Carello
7	Jailene Carrillo / Raelyn Begay	Biology	The Function of <i>macc1</i> in Post-Embryonic Growth in Zebrafish	Vida Melvin
8	Jeromie Dorrance	Biology	Investigating Spawning and Reproductive Mechanisms in <i>Aiptasia</i> Anemones	Maria Cattell
9	Maria (Meg) Green	Biology	Exploring Microbial Dynamics of Bonairian Coral Affected by Bleaching and Disease	Maria Cattell / Helene Ver Eecke
10	Eleanor Mancilla	Biology	qPCR Validation of RNA-seq Transcriptomic data for Heat Shock in <i>Oncorhynchus clarkii stomias</i>	Douglas Petcoff
11	Paige Phillips / Virginia Santillan	Biology	The effect of grazing and defecation of Canada Geese on urban environments	Robert Hancock
12	Krista E. Sherman	Anthropology	Investigating the Impact of Osteoporosis on Skeletal Age-At-Death Estimation in the Os Coxa	Michala Stock
13	Eric Linkhart	Anthropology	Infiltration Swale Study	Sarah Schliemann / Gabrielle Katz
14	Brendan Bialy	Applied Geology	The Chemical Composition of the Rind that Coats the Upper 5 to 12 feet of the Castle Rock Conglomerate	EchoHawk / Uwe Richard Kackstaetter
15	Luke Farchione / Emily Boyer	Computer Science	Bili: An Open-Source Framework for Evaluating Large Language Models in Sustainability Applications	Daniel Pittman / Alyssa Williams

16	Cece Housh, Vincent Cordova, Kyle Zimmerman	Computer Science	Social Connection Through Gamification: The Next Phase of Roadrunner Connect	Daniel Pittman / Meredith L. Jeffers
17	Abigail Read, Alfredo Cervantes, Kyle Mathiesen	Mechanical Engineering Technology	Development and Evaluation of Advanced Machine Motion Table for Kinematic and Dynamic Motions	Devi Kalla / Mingli He
18	Caoimhín Perkins	Physics	High-Altitude Orographic Cloud Conditions Above Arsia Mons	Kamran Sahami
19	Bryan Flores, Michaela Meier, et. al.	Psychology	Misinformation vs. Education: Understanding Mental Health Literacy in the Digital Age	A. Richmond/ C. Mortensen

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

Jordan Student Success Building - Mezzanine

Poster #	Name	Major	Title	Mentor
1	Kylle Been	Bachelors of Fine Art	Hyper-tufa cement Metal Mindset	Tsehai Johnson
2	Kyle Kramer	Bachelors of Fine Art	The Intricacy of Simplicity	Marin Abell
3	Ryan Dorman	Bachelors of Fine Art	queer as divine	Leslie Boyd
4	Mia Conley	Bachelors of Fine Art	<i>Circo Anima</i>	Marin Abell
5	Paul Guzman, et. Al.	Communication Design	Zeromile Issue #15 - Network	Peter Bergman
6	Artemis T. Douglas	IDP: Feminist Rhetorical Practices	How to Move the Needle: Is MMT Rhetoric an Avenue for Change Within Advocacy?	Jessica Parker
7	Ari Rabinovich	English - Secondary Education	Building Students' Social Justice-Based Critical Thinking: An Action Research Plan	Charlie Potter
8	Miguel Angel Rodríguez	Spanish and Philosophy	Between Two Writers; Borges and Ribas	Maria Rey-Lopez
9	Juan Castaneda-Ramirez	History	Rhetoric	Anthony Garcia
10	Miranda Flynn	Chemistry	Cyclic tribenzimidazole	Michael Jacobs / David Schubert
11	Stian Gilbertson	Chemistry	Chemistry of Urushiol Oil and it's Applications	Michael Jacobs
12	Casey Roberts / Frost Gordon	Biology	<i>ndnf</i> loss-of-function in zebrafish craniofacial development	Vida Melvin
13	Yailenne Rodriguez /	Biology	Mosquito Trap Catch Biodiversity Patterns Along the Front Range Urban Area of Colorado	Robert Hancock

	Maddison Hepplewhite			
14	Mackenzie Rogers	Biology	Potential Influence of Rural versus Urban Habitats and Water Proximity on <i>Salmonella</i> and <i>E. coli</i> Shedding in Wild <i>Thamnophis elegans</i>	David Merriam
15	John X. Rutherford	Biology	Essential Oil-Based Pesticide for Sustainable Pest Management	Erin Bissell / Christopher Meloche
16	Kaylyn Shearer	Biology	The Effects of Elevated CO2 Levels on Mummy Development in an <i>Aphidius colemani</i> - <i>Rhopalosiphum padi</i> Banker Plant Biological Control Pest Management System	Jennifer Bousset
17	Kiera Willford	Biology	APOBR Is Downregulated in EBV+ Tonsils of Children with Obstructive Sleep-Disordered Breathing	Regie Santos-Cortez
18	Skylar Stefonowicz	Biology	Maternal PRKAA1 protects fetal growth and uterine artery blood flow in high altitude Colorado residents	Colleen Julian, Julie A. Houck, Ramon A. Lorca, Lorna G. Moore

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

Jordan Student Success Building - Mezzanine

Poster #	Name	Major	Title	Mentor
1	Michael Hatchell / Maxwell Ricks	Healthcare administration	The Impacts of E-cigarettes and Vapes on the Health of American Youth	Garvita Thareja
2	Mira Towns, Elisabeth Lichti, Linda Riebel	Public Health	Effective approach in preventing sexually transmitted infections (STI's) – a systematic analysis	Garvita Thareja
3	Samuel Lynch / Tagwa Alsanousi	Biology	Assessment of BCG-Induced Trained Immunity in RAW264.7 cells following heterologous challenge with <i>Streptococcus pyogenes</i>	David Merriam
4	Benji Del Barco, Kacey Mears, LaKrisha Fehringer, Aden Walsh	Psychology	Does Social Media usage determine Schizophrenia Literacy?	Aaron Richmond / Chad Mortensen
5	Vilma Moreno / Ariana Rosales	Psychology	The Rising of Mental Health Stigma: The Role of Social Media Misinformation	Aaron Richmond /

				Chad Mortensen
6	Brandon Martinez, et al.	Psychology & Philosophy	Challenges for Development & Implementation of Evidence Based Teaching Practices	Arijana Barun, Cynthia Erickson, Shalini Srinivasan
7	Sarah Rones, et al.	Biology	Self-efficacy increases in active learning classrooms to enhance student success	Arijana Barun, Cynthia Erickson, Shalini Srinivasan
8	Heather Menger-Elite	Economics	Common Trajectories of Economic Boom Amidst Divergent Governmental Systems	Sabina Mlodzianowska
9	Lara Widger	Political Science	Voting Insights: Navigating Student Electoral Participation	Shayla Bischoff
10	Mary Preston	Political Science	Food and Femininity: Food Security, Sovereignty, and Justice in the Middle East and North Africa	Jennifer Seman
11	Zoe Ward	Biochemistry	Electrochemical DNA-Based Biosensor to Detect HPV/Cervical Cancer Protein E6	Andrew Bonham
12	Veronica Henderson-Davis / Steven Mendoza	Biochemistry	Identifying Essential RNA Structures for Noncanonical Cap-Independent Translation in Blackcurrant Reversion Virus	Megan Filbin
13	Christabel Ofori / Nico Tenorio	Biochemistry	Characterization of leucomethylene blue binding to DNA to improve biosensor sensitivity	Andrew Bonham
14	Viktoriya Gidenko, Isabel Thomas, Ernesto Saenz-Rascon	Chemistry	Optimization of a Serendipitous Discovery: Synthesis of Glycosyl Chlorides using Tin Tetrachloride	Shailesh Ambre
15	Grace Servia	Chemistry, Mathematics	Utilizing Simple Technology to Create an Instrument for Improved pH Measurements	Shailesh Ambre
16	Khalif Williams	Biology	Aiptasia symbiosis Model System	Maria Cattell
17	Isabella Young	Biology	Does Size Matter? An analysis of cryptic oviposition site choices observed in highly invasive <i>Aedes aegypti</i> mosquitoes in the Laboratory	Robert Hancock
18	Charlotte Campbell / Briana Wagner	Biology	Comparison of <i>E. coli</i> Antibiotic Profiles Relative to Source	Rebecca Ferrell
19	Bella Maher	Biology	A structural look at <i>Drosophila melanogaster</i> Malvolio and its role in ion transport	Emily Ragan
20	Quinn Pedrick	Biology	Berry Tasty? On the Carbon Dioxide Enrichment of Strawberry Plants	Joshua Craver

**GRADUATE STUDENT
RESEARCH AND SCHOLARSHIP FAIR**

APRIL 25, 2025; JSSB 2ND FLOOR; ROOM 211

Poster #	Presenter(s)	Master's Program	Poster Title	Mentor
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1	MSU Denver Graduate Programs			
2				
3	Karissa Urdiales	Cybersecurity	Is There a Gap in Cybersecurity Academic Programs and the Industry?	Denise Mowder
4	Emily Vican	Teaching	Analyze Science Picture Books Through Justice, Equity, and Inclusion Lenses	Dr. Caitlin Fine
5	Harvey Bowden	Clinical Behavioral Health	Exploring Tinker Toys as a Tool For Reducing Anxiety & Enhancing Group Dynamics in College Students	Dr. Tricia Natasha Hudson-Matthew
6	David Morrison	Nutrition	Current Nutritional Intake of Adolescent Combat Sports Athletes	Dr. Ann Diker
7	Catrina Harrell Emma Hansen Molly Werle Hilary Horton Becca Saeed Kathryn Hardin	Speech Language Pathology	Traumatic Brain Injury Intervention in Schools: Facilitators and Barriers	Dr. Kathryn Hardin
8	Judith Cobian	Speech Language Pathology	Patient Perspectives: Speech Therapy Provided via Telehealth to Individuals Diagnosed with Parkinson's Disease	Dr. Lesley Edwards-Gaither

**GRADUATE STUDENT
RESEARCH AND SCHOLARSHIP FAIR
APRIL 25, 2025; JSSB 2ND FLOOR; ROOM 211**

Poster #	Presenter(s)	Master's Program	Poster Title	Mentor
9	Lyn Riebel Mira Towns Elisabeth Litchi	Health Administration	Effective Approach in Preventing Sexually Transmitted Infections (STIs)-A Systematic Analysis	Dr. Garvita Thareja
10	Brandon Rowley	Health Administration	Expanding Mental Health Access for Youth Ages 14-18 in El Paso County, Colorado	Dr. Garvita Thareja
11	Sydney Burrow	Health Administration	Redefining Fertility Care: Quality Approaches Beyond Fee-For-Service Models	Dr. Garvita Thareja
12	Kenny Manzano Cassandra Henrichs	Health Administration	Relationship of Migraines and Patent Foramen Ovale (PFO)	Dr. Garvita Thareja
13	Erika Nava	Health Administration	Barriers to Mental Healthcare Access in Rural Colorado: A Focus on the Elderly Population	Dr. Garvita Thareja
14	Natosha Wittman Karla Villa Hafssa Yahya	Health Administration	Bridging Gaps in Oncology Treatment: <i>The role of Insurance Policies</i>	Dr. Garvita Thareja
15	Alana Robertson Kristen Casimier	Health Administration	The Impact of Electronic Patient Portal Access on Patient Satisfaction	Dr. Garvita Thareja



**GRADUATE STUDENT
RESEARCH AND SCHOLARSHIP FAIR**

APRIL 25, 2025; JSSB 2ND FLOOR; ROOM 211

Poster #	Presenter(s)	Master's Program	Poster Title	Mentor
16	Mike Hatchell Maxwell Ricks	Health Administration	The Impacts of E-cigarettes and Vapes on the Health of American Youth	Dr. Garvita Thareja
17	Imani Baskerville	Health Administration	Literacy and Cancer Patients	Dr. Garvita Thareja
18	Bailey Lessenberry	Health Administration	The Investigation of Care Navigator Resources in the State of Florida	Dr. Garvita Thareja
19	Richard Hammel Jordan Vo	Health Administration	Electronic Health Records: Beyond Implementation	Dr. Garvita Thareja
20	Denise Carruth	Health Administration	What are the Communication Habits of a Multigenerational Workforce in Healthcare?	Dr. Garvita Thareja