

16th Annual
 **Undergraduate**
 **Research**
 **Conference**
Southwest Minnesota State University

**WEDNESDAY,
DEC. 1, 2021**

**Conference
Begins at 8:30 a.m.**

PROGRAM



**16th Annual Undergraduate Research Conference
at Southwest Minnesota State University**

WELCOME AND KEYNOTE

Zoom Link: <https://minnstate.zoom.us/j/98546707508>

Password: URC2021

Room Moderator: Dr. Alyssa Anderson

- 8:30 Dr. Ross Wastvedt, SMSU Provost, Opening Remarks
- 8:40 Tracy Rosenberg, M.F.A Creative Writing; M.S. Kinesiology and Exercise Science, Educator and Grassland Restorationist
Keynote Address: "Life Purpose: How College and Career Leads to One's Calling"

ORAL SESSION A

SMSU Conference Center Upper Level

Biology, Environmental Science, Philosophy, and Political Science

- 10:00 Zachary Stute, Philosophy, Hobbes, Machiavelli, and Roblox
- 10:15 Ryan Fohrman, Political Science, Causes of Metro vs. Greater Minnesota School Funding Disparities
- 10:30 Cory Becker, Political Science, Broadband: Connecting Rural America
- 10:45 BREAK
- 11:00 Dylan Lauer, Political Science, Does Duluth Need the Northern Lights Express?
- 11:15 Joey Heinen, Biology, The Consistency of Aggression in Madagascar Hissing Cockroaches and its Relation to Body Size
- 11:30 Kaytlen Heacock, Environmental Science, The Change in Biota from Edge Effects in a Minnesota Tallgrass Prairie
- 11:45 Courtney Snyder, Environmental Science, The Effectiveness of Constructed Wetlands in Reducing Nutrients from Crop Tile Drainage in Rural Southwest Minnesota
- 12:00-1:00.... LUNCH BREAK
- 1:00 King Saenz and Jackson Vierstraete, Biology, Effects of Fertilized Diluted Feed on *Vanessa cardui*
- 1:15 Mikaela Lawrence, Biology, Abundance and Diversity of Collembola as a Result of Soil Management Practices

- 1:30 Mason Johnson and Brandon Parish, Biology, Effect of Audio Stimulation on Avian Feeding Behavior
- 1:45 Katelynn Urness, MacKenzie Klett, and Mieraf Dagne, Biology, Analysis of Food Preference and Selection Time on Male Betta splendens
- 2:00 Jason Turner, Alexander Hillesheim, Nicholas Putnam, and King Blanchette, Biology, Efficacy of Essential Oils on Coccinellidae
- 2:30 BREAK
- 2:45 Casey Wahl and Alyssa Enevold, Biology, The Effects of Permethrin on Dragonfly Nymph Behavior
- 3:00 Noah Pankonin, Brandon Parish, and Trust Amitaye, Biology, Effects of Differing Concentrations of Pesticide on Crickets
- 3:15 Regan Truedson and Alexis Freese, Biology, Feeder Preferences and Their Effect on Frequency of Bird Visits
- 3:30 Regan Truedson and Alexis Freese, Biology, Patterns of Food Aggression and Dominance in Black-capped Chickadees (*Poecile atricapillus*)
- 3:45 Bailey Bingen, John Palmer, and Madelynn Singsank, Biology, Autotomy-Induced Stotting Behaviour in Opiliones
- 4:00 Courtney Snyder, Paige Shwaluk, Madeleine Shwaluk, and Emma Polchow, Biology, Water Quality Assessment of the Redwood River in Southwest Minnesota using Macroinvertebrates as Biological Indicators

ORAL SESSION B

Charter Hall 201

Accounting, Communication Studies, History, Sociology, and Theatre

- 10:00 Alexander Duus, Communication Studies, Panic and Anxiety: A Poetry Program
- 10:15 Jenna Zeug, Communication Studies, Humanity, Liminality, and Ghosts: An Oral Interpretation of "Haunt" by Carmen Maria Machado
- 10:30 Devyn Halvorson, Communication Studies, Repurposing the Spectacle: A Debordian Analysis of "L'Après M"
- 10:45 BREAK

- 11:15 Domonique McPhail, Communication Studies, Drama/Drama:
A Performative Comparison of Sean Grennan's "The Tin
Woman"
- 11:30 Kylie Kessler-Gross, Sociology, Physician-Assisted Suicide
- 12:00-1:00.... LUNCH BREAK
- 1:15..... John Dwire, History, Colonel Henry Clay Lester's Actions at
the Battle of Murfreesboro
- 1:30..... Braeden Kluver, History, A Regional and National Examination
of the National History Standards
- 1:45..... Rees Lehman, History, Effects of 1980's Farm Crisis on Farmer
- 2:00..... Noah Streed, History, Burial Practices Amidst Spanish Flu
- 2:15..... Cory Becker, History, The Minnesota Massacre of 1978: An
Election Like No Other
- 2:30..... BREAK
- 2:45..... Carter Haugrud-Damlo, History, The Impact of Native
Boarding Schools
- 3:00..... Ojasope Ale, Theatre, Drag Makeup
- 3:15..... Jennifer Homan, Theatre, Nature Fairy
- 3:30..... Bassam Mian, Accounting, The Impact of The Student Loan
Debt
- 3:45 Mark Ezenezi, Accounting, How To Improve DMCA for
Streamers

VIRTUAL SESSION A

VIA ZOOM – 10:00 – 10:45AM

Zoom Link: <https://minnstate.zoom.us/j/6699068969>

Password: URC2021

Room Moderator: Ruthe Thompson

English

- 10:00 Autumn Hess, English, Archetypal Themes in Stephen King's
Desperation: Setting, Plots, and Characters
- 10:15 Melissa Yahr, English, Tara Westover's Transformation: How
Educational Standards Changed a Life
- 10:30 Maggie Biegert, English, Archetypal Analysis of the Farmer

VIRTUAL SESSION B

VIA ZOOM – 1:00 – 2:15PM

Zoom Link: <https://minnstate.zoom.us/j/91526117789>

Password: URC2021

Room Moderator: Dr. Cindy Aamlid

Sociology, Theatre, and Psychology

- 1:00 Kayla Chester, Sociology, Working for Children
- 1:15 Morgan Malakowsky, Sociology, The Differences Between Same-Sex and Heterosexual Weddings
- 1:30 Molly McGough, Sociology, Youth Homelessness
- 1:45 Elizabeth Zoya, Theatre, The Make-up of the Fae
- 2:00 Amy Leervig, Psychology, Cognitive Control and Spontaneous Recognition Memory of Distracting Information

STUDENT RECITALS

1:00 - 1:50PM

Fine Arts Theatre

Cheyenne Volk Music "Le Violette" from *Pirro e Demetrio*, Act. III 2

Alexis Christensen, Music, *Air*

Kevin Totusek, Music, *Filibuster*

Megan Thooft, Music, "Una donna a quindici anni" from *Così fan Tutti* Act II, Scene 1

Jenna Vick, Music, *Srpska igra* No. 9 from *Funny Marimba Book*

POSTER PRESENTATION SESSION A

SMSU Conference Center Lower Level

Posters displayed 8:30AM – 5:00PM

Times shown indicate when authors will be present at the poster
Agribusiness, Biology, Computer Science, Environmental Science, Exercise Science, Hospitality Management, Mathematics, Psychology

- 1..... Cassy Platz and Ashley Zwack, Agribusiness Management, Economic Development in Brazil, 10:30 - 12:00
- 2..... Alexis Freese, Biology, The Potentials and Concerns of Targeting the Type IV Pili, in Vaccination Against Infectious Bovine Keratoconjunctivitis (IBK) 9:45-11:15

- 3.....John Palmer, Biology, The Impact of Human-Caused Noise Pollution on Marine Mammals 10:30 - 12:00
- 4Alexis Freese, Drake Vlainick, and Stephen Emrich, Biology, Effect of Soil pH on the Height of Radish Varieties 10:30 - 12:00
- 5Noah Pankonin, Brandon Parish, Mary Grace Hinkle, and King Saenz, Biology, Assessing Plant Diversity in the SMSU Restored Prairie, 10:30 - 12:00
- 6Abigail Schotter, Biology, The Effects of Grain-Free Diets and Taurine on Canine Dilated Cardiomyopathy, 1:00-2:30
- 7Trust Amitaye, Biology, The Efficacy and Mechanism of Vitamin D in the Treatment and Prevention of Hypertension, 2:30-4:00
- 8Katelynn Urness, John Palmer, Courtney Snyder, and Alyssa Enevold, Biology, Comparing Plant Diversity Between a Recent and Older Prairie Restoration at Camden State Park, 2:30-4:00
- 9David Adigun, Computer Science, Online Store Application, 9:45-11:15
- 10Suman Baniya, Computer Science, See-Me, 9:45-11:15
- 11Camden Barta, Computer Science, Web Application for North Dakota Heritage Party, 10:30 - 12:00
- 12Deepak Karki, Computer Science, Kathmandu Real State, 1:00-2:30
- 13Sean Sweeney and Gwendolen Sior, Computer Science, Robot Controls, 1:00-2:30
- 14Courtney Snyder, Environmental Science, Mapping and Quantifying Bird Window Strikes at the SMSU Campus, 9:45-11:15
- 15Ivan Carrillo, Cesar Carrillo, and Cooper Martens, Exercise Science, Effects of Intermittent Fasting on 100yds Swimming Time and Diving Distance in Collegiate Female Swimmers, 9:45-11:15
- 16Jenna Borchers, Olivia Drummer, Lauren Klein, and Bryan Peralta Garces, Exercise Science, The Difference in Reaction Time Between Division II Women's Basketball Players and Softball Players, 10:30 - 12:00

- 17 Daniel Jonah, Steven Nava, and Marshawn Reese, Exercise Science, The Effects of Active and Passive Rehearsal on Field Reaction Time in College Football Athletes, 1:00-2:30
- 18..... Kendra Moyars, Ethan Goldman, and Teresa Tynio, Hospitality Management, Examining Student's Experience and their Satisfaction on the 2021 Southwest Minnesota State University Homecoming Events, 9:45-11:15
- 19..... Jill Remmele, Sara Pistello, and Lenna Ribar, Hospitality Management, Measuring Southwest Minnesota State University Student Satisfaction of Chartwells Residential Dining, 10:30 - 12:00
- 20..... Deepak Sharma, Mathematics, Approximate Solutions of Nonlinear Algebraic Systems using Power Series Method, 9:45-11:15
- 21..... Robert Shields, Mathematics, The Incompleteness of Mathematics, 9:45-11:15
- 22Alexandrea Samuelson, Mathematics, Solving Sudoku with Mathematical Methods, 1:00-2:30
- 23Olivia Drummer, Katelyn Johnson, Joy Krosschell, and Madelyn Wade, Psychology, Cognitive Control Affects Memory for Distracting Information, 10:30 - 12:00
- 24 Courtney Hedeem, Julianne Pankow, Isabella Rickmyer, and Abigail Satterlee, Psychology, Cognitive Control and Spontaneous Recognition Memory of Distracting Information, 1:00-2:30
- 25Gracie Lenz and Madelyn Wade, Psychology, Pessimistic Vs. Optimistic COVID-19 Outlook: Effects on Meaning in Life, 1:00-2:30

POSTER PRESENTATION SESSION B

SMSU Student Center Upper Level (SC 216)

Posters displayed 8:30AM – 5:00PM

Times shown indicate when authors will be present at the poster
*Communication Studies, History, Music, Philosophy,
Political Science, and Theatre*

- 26 Sarah Spieker, Communication Studies, SMSU Student Performance Anxiety: Public Speaking vs. Musical Performances, 9:45-11:15
- 27..... Rylie Brown, Communication Studies, Are Female Athletes Treated Differently Than Male Athletes? 10:30 - 12:00
- 28 Morgan Johnson, Communication Studies, Press Secretary Non-Verbals, 10:30 - 12:00
- 29 Hanna Vos, Communication Studies, Nonverbal Immediacy Behavior of YouTubers, 1:00-2:30
- 30 Darren Winkelman, Communication Studies, The Suspense of the Prehistoric: Jurassic Park, 1:00-2:30
- 31 Kristen Neumann and Devyn Halvorson, Communication Studies, Impression Management Via Personal Appearance of Univeristy Faculty Who Identify as Women, 1:00-2:30
- 32 Adihia Bell, Communication Studies, Words Is Strength: Motivating The Collegiate Athlete, 2:30-4:00
- 33 Neil Hanson, History, The Miracle on Ice, 9:45-11:15
- 34 Palmer Hittesdorf, History, How German Prisoners-of-War Helped Alleviate The Labor Shortage in Sleepy Eye, Minnesota During the Second World War, 9:45-11:15
- 35 Cheyenne Volk, Music, "Già il sole dal Gange" and "Le Violette": A Stylistic Comparison of the Works by Alessandro Scarlatti, 9:45-11:15
- 36 Kevin Totusek, Music, Differences Between Writing a Jazz Chart and a Classical Composition, 10:30 - 12:00
- 37 Megan Thooft, Music, Mozart's Cosi Fan Tutti: Comedy or Misogyny? 10:30 - 12:00
- 38 Alexis Christensen, Music, Toru Takemitsu and His "Air", 2:30-4:00

- 39 Jenna Vick, Music, A Comparative Analysis of Selections from the Funny Marimba Book by Nebojsa Jovan Zivkovic, 2:30-4:00
- 40 Carter McLaughlin, Philosophy, Using Rawls' Veil of Ignorance to Colonize Space, 1:00-2:30
- 41 Carter McLaughlin, Philosophy, Space Exploration: A Philosophical Cost-Benefit Analysis, 2:30-4:00
- 42 Matthew Hartley, Political Science, Prospects for Broadband Expansion in Minnesota, 10:30 - 12:00
- 43 Tucker Machart, Political Science, The Effects of Coronavirus on Law Enforcement in Greater Minnesota, 1:00-2:30
- 44 Jesutofunmi Segun-Alao, Political Science, Immigrants in the Greater Minnesota Workforce, 2:30-4:00
- 45 Molly Green, Theatre, Joe Dulude ii, 9:45-11:15
- 46 Dimitri Richard, Theatre, The Illusion of Age Makeup, 9:45-11:15
- 47 Colton Jensen, Theatre, The Makeup of Mrs. Doubtfire, 9:45-11:15
- 48 Bryn Mongeau, Theatre, Blurring the Binary - The History of Drag, 10:30 - 12:00
- 49 Alexander Duus, Theatre, Creating Pennywise, 10:30 - 12:00
- 50 Alexis Christensen, Theatre, The History and Development of Makeup in Kabuki, 10:30 - 12:00
- 51 Domonique McPhail, Theatre, Radium in Cosmetics, 1:00-2:30
- 52 Matthew Hartley, Theatre, How Makeup Contributes to Coulrophobia, 1:00-2:30
- 53 Brady Berg, Theatre, Villain Makeup in the Bond Films, 1:00-2:30
- 54 Allyson Thuringer, Theatre Dangerous Makeup: the Wizard of Oz, 2:30-4:00
- 55 Emma Lipinski, Theatre, Egyptian Stage Make-Up Application Process, 2:30-4:00
- 56 TJ Tjeerdsma, Theatre, Zombie TV and Movie Makeup, 2:30-4:00

**CLOSING SESSIONS AND
PRESENTATION OF LIBRARY RESEARCH AWARD**

SMSU Conference Center Upper Level & Zoom

Zoom Link: <https://minnstate.zoom.us/j/98546707508>

Password: URC2021

Room Moderator: Dr. Alyssa Anderson

4:30 Closing Remarks and Presentation of Library Research
Award

DISCOVER.

ENGAGE.

LEAD.



www.SMSU.edu | 1-800-642-0684

For more information contact conference coordinators:
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