

*10th anniversary*  
**undergraduate  
research  
conference**  
**2015**



**SOUTHWEST MINNESOTA STATE UNIVERSITY**

**Wednesday, December 2, 2015**

Starting at 8:30 a.m. | SMSU Conference Center

**PROGRAM**

# Welcome and Keynote

*SMSU Conference Center Upper Level*

- 8:30..... Dr. Connie Gores, SMSU President, Opening Remarks  
8:45..... Martin A. Draper, PhD, USDA, National Institute of Food and  
Agriculture  
Keynote Address: "Education, Research and Critical Thinking:  
Keys to a Progressive Society"

## Oral Session A

*SMSU Conference Center Upper Level*

- 9:45..... Terrance Maier, Environmental Science, Habitat Preferences  
for Mule and White-Tailed Deer in South Central South  
Dakota  
10:00..... Devin Ryan, Environmental Science, Seasonal survey of frog  
and toad species and abundance at multiple sites near Lake  
Sarah, Southwest Minnesota  
10:15..... Emilee Gutzmer, Meredith Hyatt & Audi Nickel, Biology,  
Insect Biodiversity: A Comparison of Sweetland Hall Prairies,  
Marshall, MN  
10:30..... BREAK  
10:45..... Travis Radke, Environmental Science, Summer Roadside  
Use by White-Tailed Deer near Currie, Minnesota  
11:00..... Caci Lingen Environmental Science, Survey of Pollinators in  
the ADM-SMSU Wildlife Area Marshall, MN Summer 2015  
11:15..... Claire Sames, Rhiannon Sears & Ashley Millerbernd, Biology,  
Influence of Temperature and Precipitation on the Prevalence  
of Lyme Disease in Minnesota  
11:30..... Devin Ryan, Emily Heesch & Marissa Mattson, Biology,  
Density of Goldenrod Plants With and Without Insect Galls in  
the SMSU Wildlife Area  
11:45..... Caroline Mukeshimana, Dylan Johnson & Mikaela Cypher,  
Biology, Isolation of Antibiotic-Producing Microbes from Soil  
Collected in Marshall, MN  
12:00-1:15 . Jess Rockeman, DC Crowell and Stephanie Wisdom,  
Creative Writing- Original Works, "Interesting, but Terribly  
Overrated"  
1:30..... Krishna Ghimire, Environmental Science, Effects of LED  
Light vs Fluorescent Light on the Growth of Radish Plants  
(*Raphanus sativus*)  
1:45..... Taylor Buchtel, Catarina Gronau, Casey Hertz & Katlyn  
Sandbulte, Biology, Comparison of Plant Species in an Old  
and New Reconstructed Prairie in Southwest Minnesota

- 130..... Leah Bernard, Sociology, Barriers and Inequalities in Healthcare for Individuals with Disabilities, 10:30-11:30 & 4:00-4:30
- 131..... Tehra Christianson, Sociology, Child Abuse and Trauma Services, 11:30-1:00

## Poster Presentation Session D

### *PE Link Upper Level*

Posters displayed 8:30 am to 5:00 pm,  
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 Accounting, Mathematics, Political Science,  
 Psychology, Sociology & Theatre

- 132..... Annie Magnuson, Theatre, Make-up for Mermaids, 1:00-2:30
- 133..... Emilie Baartman, Theatre, Rocking the Rock Star Look: Gene Simmons, David Bowie, and Alice Cooper, 2:00-3:30
- 134..... Joel Gay, Theatre, Making Actors Bleed, 3:00-4:30
- 135..... Jenna Miller, Theatre, 1920's Style Makeup, 12:20-2:00
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- 12:00..... LUNCH BREAK
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- 2:00..... Broderick K. Eveslage, History, Modern History: The 2009 Decision of the ELCA
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- 2:30..... Broderick Goens, History, The Use of POW Camps in Minnesota During World War II
- 2:45..... BREAK
- 3:00..... Adam Savariego, History, Founding of the Upper Sioux Community
- 3:15..... Grady Holtberg, Sociology, Substance Abuse Treatment and the United States Prison System

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*SMSU Conference Center Lower Level*

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Agronomy, Biology, Computer Science, Economics,  
Exercise Science, History & Mathematics

- 1..... Briana Reiersen, Biology, An interplay between oxidative stress and autoimmunity in the pathogenesis of vitiligo, Formal 11:30-12:00, Informal 3:15-3:45
- 2..... Phil Duerr, Agronomy, The Use of Lettuce Extract as a Natural Herbicide, 10:30-12:00
- 3..... Paige Hendrickson & Taylor Holicky, Biology, The allelopathic effect of orange, lemon, and banana peel extract on dry weight and overall height of corn, Paige 2:30-3:15, Taylor 9:45-10:30
- 4..... Tiffany Gehl, Exercise Science, Diet and Body Composition of SMSU Women's Basketball Team, 2:30-3:30
- 5..... Rebecca Sommer, Biology, Small Interfering RNA as the Silver Bullet for Cancer, Formal 1:30-2:00, Informal 2:00-2:30

- 49..... Exhibit Introduction
- 50..... Methods, Stephanie Geier, 9:30-11:00
- 51..... Literature Review, Katherine Speiker, 2:30-4:00
- 52..... Demographics, Malik Johnson, 1:00-2:30
- 53-102 ..... Story Posters, Megan Lynne 9:30-11:00, Katie Hatch 1:30-3:00
- 103..... Findings and Conclusions, Marly Cid: 9:30-10:00 & 12:30-2:00, Erin Reps: 10:30-11:30 & 3:30-4:30, Hussein Oman: 11:00-12:30, Mu Mu Aye: 2:00-3:30, Yesenia Cerda: 3:30-5:00
- 104..... Works Cited
- 105..... Acknowledgements

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*SMSU Library Plaza*

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- 111 ..... Jory Dove, Spencer Thomas & Destiny Fredricks, Psychology, Size Perception at Multiple Angles, 11:30-12:30
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- 113..... Alexis Frick, Blake Nath, Nick Kellen & Leah Hacker, Psychology, The Effect of Task Engagement on Time Perception, 11:30-12:30
- 114..... Kayla Chisum, Psychology, SMSU Students' Understanding of Civic Engagement: A Qualitative Analysis, 10:30-11:30 & 12:30-1:00
- 115..... Dave Lien, Psychology, Barriers to Non-Traditional Student Enrollment and Retention at SMSU, 1:00-2:30

- 22..... Michael Mattick, Biology, Loxosceles Spider  
Envenomation: Mechanism of Action of Sphingomyelinase  
Phosphodiesterase (SMase D) and its Effects on Human  
Tissue, Formal 9:45-10:15, Informal 2:45-3:15
- 23..... Chidera Ndubuisi, Okeleamaka J. Chukwuyem & Oluchi  
Olivia Ndubuisi, Biology, Allelopathic Effect of Ginger  
Rhizome Extract on the Seedling Growth of Lettuce, Chidera  
10:00-10:45, Okeleamaka 1:30-2:15, Oluchi 10:45-11:30
- 24..... Ben Spaeth, Computer Science, Vote Helper iOS App, 1:00-  
2:30
- 25..... Zach Bailey, Computer Science, Iron Fist, 9:30-11:00
- 26..... Chantel Paul, Zachary Specht & Jonathan Cross, Exercise  
Science, Effects of High-Intensity Interval Training on Body  
Composition of Wheelchair Athletes, Chantel only 9:45-10:45
- 27..... Zachary Specht, Jonathan Cross & Chantel Paul, Exercise  
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system, Zach only 1:00-2:00
- 28..... Jonathan Cross, Zachary Specht & Chantel Paul, Exercise  
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wheelchair pushing kinematics, Jonathan only 10:45-11:45
- 29..... Erin Kamrath, Exercise Science, Foam Rolling and Football  
Summer Conditioning, 9:45-10:45
- 30..... Spencer Louwagie, Computer Science, Developing a  
Website For Technology Assistance, 2:00-3:30
- 31..... Kaylee Benson, Mathematics, Mathematical Analysis of  
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- 32..... Joseph Lilleberg, Computer Science, Developing an Arena  
Brawler using Unreal Engine 4, 9:30-11:00
- 33..... Jake H. Schueller, Mathematics, NCAA Football BCS  
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- 34..... Melissa Bartz, Biology, WITHDRAWN
- 35..... Libby Tolzin, Alex Dequaine & Colten Bristle, Biology, The  
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- 36..... Kristy Leopold, Psychology & Exercise Science, The  
Marshall Community: The Financial Burden on Psychosocial  
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- 37..... Ryan Miller & Emmanuel Asota, Computer Science, Escape  
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