



7th Annual
**Undergraduate
Research
Conference** **12**
at Southwest Minnesota State University

**Wednesday,
December 5**

Starting at 8:30 a.m.
in the SMSU Conference Center

PROGRAM

Welcome and Keynote

SMSU Conference Center Upper Ballroom

- 8:30Dr. Ronald Wood, SMSU President, Opening Remarks
8:45Margaret J. Filardo, PhD, Keynote Address
“The Story of the Columbia River: The real-time application of scientific data”

Platform Session A

SMSU Conference Center Upper Ballroom

- 9:45Wokil Bam, Environmental Science, Sodium Analysis in Redwood River Water in Southwest Minnesota
10:00Brooke Burmeister, Environmental Science, Effects of Barley Extract on the Growth of Algae *Spirogyra*, *Synedra*, and *Ankistrodesmus*
10:15Rachel Graupmann, Environmental Science, *Staphylococci* Occurrence and Resistance to Antibiotics on the Southwest Minnesota State University Campus
10:30BREAK
10:45John R. Callaghan, Environmental Science, The Effectiveness of Worm and Minnow Bait for Catching Fish at Big Creek Lake
11:00.....Tony Ross, Environmental Science, An Evaluation of the Ring-necked Pheasant (*Phasianus colchicus*) Population in Lyon County, Minnesota
11:15.....Diana Moe, Environmental Science, Diversity of Invertebrates in a Prairie, Tree-covered and Mowed Lawn Area of the ADM-SMSU Environmental Learning Center
11:30.....Hadiza Raji, ENVS, Comparing the Metabolic Fingerprint of Bacterial Communities in Different Sites of the Redwood River in Marshall, MN
11:45.....Stephanie Speer, Environmental Science, Historical Population Expansion and Land Use in Lyon County and Marshall, Minnesota
12:00-1:00 Brittney Heimermann, Wes Huntington, Nick White, Creative Writing, Senior Readings, “Well, This is Weird”
1:45Kevin Okello, Environmental Science, Characterization of Quaternary Glacial Lake Marshall
2:00Brian Nordby, Environmental Science, Benthic Macroinvertebrates as an Indicator of Water Quality in the Redwood River Near Vesta, Minnesota

- 2:15Elina Bajracharya, Environmental Science, Changes in Precipitation and Lake Levels in Lyon County, Southwest Minnesota
2:30Abbey Finken, Environmental Science, Evaluation of the Sand Composition of the Minnesota River
2:45Levi Windingstad, Environmental Science, Investigation of the Antelope Moraine in Lyon and Yellow Medicine Counties Minnesota
3:00David D. Kriesel, Psychology, A Service Dog In Social Interaction
3:15**BREAK**
3:30Sara O’Konek, LaKeisha Burns & Sharon Carlson, English/Scientific & Technical Writing, Locally Grown Food on Campus
3:45Brooke Burmeister, Maxx Raths & Sally Grams, English/Scientific & Technical Writing, Reducing Costs and Energy Use in Restrooms
4:00Brynn Berens & Ben Tiensvold, English/Scientific & Technical Writing, Sustainable Lighting
4:15Ashlinn Thommes, Ashley Diekmann & Travis Radke, English/Scientific & Technical Writing, Sustainability Through Interior Design
4:30Lauren Teal, Katie Robertson & Jena Thompson, English/Scientific & Technical Writing, Repurposing Used Cooking Oil

Platform Session B

SMSU Charter Hall 201

- 9:45Bethany Hultgren, Ben Pedersen & Joe Christensen, Ecology, Density of gall-forming parasites, the gall fly and gall boring beetle, in Canada Goldenrod
10:00Rachel Patnoe, Ashley Edwards & Jessica Peterson, Ecology, Insect Diversity in Southwest Minnesota
10:15Seifemichael Kenea, Bina Lama & Kevin Okello, Ecology, Density of Trees Species Along an Elevational Gradient in Camden State Park, Minnesota
10:30**BREAK**
10:45Jenna Carlson, Roma kc & Anil Pande, Ecology, Effect of Habitat and Gall Presence on Shoot and Inflorescence Biomass of Canada Goldenrod (*Solidago canadensis*)
11:00.....Leah Peck, Brittany Van Overbeke & John Craig, Ecology, Quantification of Chlorophyll Pigmentation in Burning Bush (*Euonymus alatus*) and Ginkgo Tree (*Ginkgo biloba*) over a Three-week Period in Fall 2012
11:15.....Samantha Pehrson & Azhar Adam, Political Science, Results of the 2012 Lyon County Exit Poll

- 11:30.....Justine Buchman, Psychology, PTSD Symptoms: Civilian vs. Military Personnel
- 11:45.....Neharika Upadhyaya, Mayra Montelongo & Chandan Gupta, Ecology, Density of Prairie Dock, an Invasive Native Species, in the SMSU Wildlife Area

12-1:30 LUNCH BREAK

- 1:30Amy Johnson, Art History, Anubis and the Art of the Dead
- 1:45Tara Borman, Art History, Egyptian Cats: Mummies and Gods
- 2:00Ann Kopitzke, Psychology, We're All a Bit Racist
- 2:15Sujeeta Maskey, Trista Hacker & James Oliver, Ecology, Diversity of Airborne Insects in the Prairie and Coniferous Forest of the SMSU Wildlife Area
- 2:30Diana Moe & Jessica Sheehan, Ecology, Survivorship of Men and Women from Lyon County Minnesota During the Spanish Influenza Pandemic
- 2:45Amy Dreessen, Gabrielle Dufour & Molly Manthe, Ecology, Change in Bird Density in Six Counties of Southwest Minnesota Over a Ten Year Period

Platform Session C

SMSU Bellows Academic 102

- 11:15.....Christian Brown, History, Superheroes Through the Ages
- 11:30.....Anna Gwendolyn Eben, Theatre, Elizabethan Costume: Hamlet
- 11:45.....Jessa Roberts, Theatre, Medieval Theatre: Miracle, Mystery, Morality
- 12-1:30 Lunch Break**
- 1:30Callie Frank, Theatre, Romeo and Juliet: Influences in Entertainment
- 1:45Andrew O. Kompelien, Theatre, Greek & Roman Costumes
- 2:00Krista Steen, History, The Cuban Revolution's Effect on Education and Ballet
- 2:15Ryan Risa, Theatre, History of the Greeks: Theatre and Thespis
- 2:30Emily Schoepfoerster, History, Emmeline Pankhurst and the Women's Social and Political Union: Scholarly Interpretations Through the Ages
- 2:45Lynn Lafky, Theatre, The Beginning of Opera in the Italian Renaissance
- 3:00Kevin Riemenschneider, History, The Media's Darkest Hour: How Propaganda Killed Millions in World War II
- 3:15BREAK**

- 3:30Brian Bau, History, Edmund Burke and Thomas Paine
- 3:45Jason S. Weber, History, A University and its Nickname: The History of the Fighting Sioux and the University of North Dakota
- 4:00Tyler Wagner, Psychology, Can your social profile help get you a date?

Poster Presentations Session A

SMSU Conference Center Lower Ballroom

Posters displayed 8:30 am-5:00 pm

Authors available at time listed after title

Academic areas: Agronomy, Ag Business, Accounting, Biology, Chemistry, Environmental Science, Exercise Science, Sociology

- 1Leah D. Riley, Biology, Increased Polyunsaturated Fatty Acid Supply to Central Nervous System Promotes Neurodevelopment and Neuroprotection, 10:30-11:30
- 2Amy Dreessen, Biology, Apoptotic Effects of Lenalidomide on Cells with 5q Deletions in Myelodysplastic Syndromes, 9:45-10:15; 1:30-2:00
- 3Stephanie Tulibaski, Biology, Effects of Cocoa Flavonols on Blood Pressure Through Vasodilation, 3:00-4:00
- 4Alexis Peters, Jerry Bockman & Mark Christopherson, Biology, Comparing the Allelopathic Effects of Juglone on Tomato and Barley, Bockman 11:00-11:45; Peters/ Christopherson 1:30-2:15
- 5ReNae Clark, Chryseis Tvedt, Barry Alderson & Lisa Panitzke, Agronomy, Effect of Temperature and Salinity on Rate of Germination of Corn, Wheat, and Soybean Seeds, 3:30-4:15
- 6Haley Gudim & Kaitlyn Norell, Exercise Science, Comparison of Dietary Intakes Between Wheelchair and Able-Bodied Basketball Players, 1:30-2:15
- 7Angela Wieland, Chemistry, Electrochemical Trace Analysis of Simazine, 2:30-3:15
- 8Alexis Walker, Chelsea Robinson & Theresa Ehnert, Biology, Allelopathic Effects of Thyme on Zinnias, Ehnert/Robinson 9:45-10:30; Walker 11:15-12:00
- 9Sujeeta Maskey, Environmental Science, Observation of Seasonal Changes in Market Street Mall Wetland, Marshall, 3:30-5:00
- 10Molly Manthe, Biology, A Potential Molecular Mechanism for Asthma 1:00-1:30;4:30-5:00

- 11.....Jenna Carlson, Biology, Effects and Prevention of Accumulation of Cadmium with Regard to Wet Age-Related Macular Degeneration, 11:30-12:00; 2:00-2:30
- 12Drew Hultquist, Environmental Science, Seasonal Changes in a Transitional Wet Meadow-Shallow Marsh Wetland in Southwest Minnesota, 4:00-5:00
- 13Drew Hultquist, Biology, Possible Mechanisms for Biological Control of the Emerald Ash Borer (*Agrilus planipennis*), 1:30-2:00; 3:30-4:00
- 14Leah Peck, Biology, Substrate Reduction Therapy using N-butyldeoxygalactonojirimycin Improves Overall Outcomes in Patients with Lysosomal Storage Diseases, 11:30-12:00; 2:30-3:00
- 15Katelyne Alderson, Biology, Factors that Contribute to the Long Term Sustainability of Coral Reefs, (withdrawn)
- 16Joe Christensen, Environmental Science, Changes in a Redwood River Riparian Wetland from Late Summer to Fall 2012, 3:30-5:00
- 17Erin Erickson, Exercise Science, The Evolution of the Doctorate of Physical Therapy Program, 1:00-1:45
- 18Jessica Sheehan, Biology, Copper Induced Olfactory Response and Recovery to Salmon Populations, 10:00-10:30; 4:00-4:30
- 19Brittany Van Overbeke, Biology, Effectiveness and Possible Mechanism of Alendronate (Fosamax) and Vitamin D3 on Osteoporosis, 1:30-2:30
- 20Ashley Edwards, Biology, Treatment of Anemia in Myelodysplastic Syndromes (MDS) with Erythropoietin (EPO) and Granulocyte Colony Stimulating Factor (G-CSF), 11:00-11:30; 3:00-3:30
- 21Nicholas Dorman, Laura Ness, Gregory Pavek & Walker Schaar, Biology, The Effects of Floralife and Silver Nitrate on Vase Life of the Common Rose Ness/Dorman 9:45-10:30; Pavek/Schaar 1:00-1:45
- 22Kaitlyn Konz & Gillian Rolfe, Biology, Allelopathic Effects of Coffee (*Coffea arabica*) on Barley (*Hordeum vulgare*) Seed Germination and Dry Weight, 1:30-2:15
- 23David Williamson, Biology, Treatment Options for Attention-Deficit/Hyperactivity Disorder (ADHD): Stimulant versus Non-Stimulant Medications, 11:30-12:00; 2:30-3:00
- 24Gregory Pavek, Environmental Science, Water Quality and Seasonal Changes in Marshall Flood Diversion Channel Wetland, 3:30-5:00
- 25Deewan Bajracharya, Bina Lama & Dawa Rai, Biology, The Effects of Citric Acid on Vase Life of Cut Carnations, Bajracharya 10:00-10:45; Lama/Rai 3:15-4:00
- 26Britt Wickett & Mark S. Chollmeyer, Exercise Science, Effects of Muscular Strength Characteristics on Running Acceleration in Division 2 College Football Players, 11:00-11:45
- 27Craig Popper, Exercise Science, Academic Satisfaction of Wheelchair Athletes at SMSU, 1:45-2:30
- 28Jared Wagner, Environmental Science, Seasonal Changes in Good Medicine Wildlife Management Area Wetland Fall 2012, 3:30-5:00
- 29Lisa Schroeder, Exercise Science, The Effect of Acute Moderate Exercise on the Stroop Effect, 11:15-12:00
- 30Gannon Moore & Adam Iversen, Exercise Science, Effects of a Novel Stretching Method on Standing Broad Jump, 1:45-2:30
- 31Kasey Schreiber, Kim Rothmeier & Beth Ochs, Exercise Science, The Effects of Caffeine on the Rockport Walk Test, 2:00-2:45
- 32Tony Ross, Environmental Science, Monitoring of Seasonal Changes in Marshall, Minnesota's Runnings Wetland, 3:30-5:00
- 33Evyn Hubbard & Joshua Watterson, Exercise Science, Post-Exercise Ankle Brachial Index in Spinal Cord Injured/Affected Individuals, 2:30-3:15
- 34John R. Callaghan, Environmental Science, Observations and Analysis of Independence Park Wetland, 3:30-5:00
- 35Ashley Vikander & Briean Gutzke, Exercise Science, Performance of Collegiate Wheelchair Basketball Athletes on the National Wheelchair Basketball Association Skills Test, 2:45-3:30
- 36Manisha Bajracharya, Exercise Science, Influence of Exercise on Mood State, 10:30-11:15
- 37Levi Windingstad, Environmental Science, Effects of Seasonal Change on the Riparian Wetland Adjacent to the SMSU Soccer Field, 3:30-5:00
- 38Jenny Johnson, Exercise Science, Ratio of Hamstring/Quadriceps Strength of Collegiate Softball Players, 1:00-1:45
- 39Neharika Upadhyaya & Alan Porter, Biology, The Allelopathic Effect of Pine Extract on Zinnia Plants, 10:45-11:30
- 40Lance Schuveiller, Exercise Science, Kicking Characteristics and Foot Acceleration in Two Different American Football Kicking Styles, 11:00-11:45
- 41Hannah Beeler, Environmental Science, Observations and Data Analysis of the Americlnn Wetland, 3:30-5:00
- 42Bailey Andersen, Sabrina Espinoza & Sharon Carlson, Biology, Effects of Orange, Lemon, and Grapefruit Peel as a Weed Inhibitor, Carlson 10:15-11:00; Espinosa/Anderson 3:15-4:00

- 43Gatluak Chuol, Ag Business, Agricultural Development in Sudan
3:00-4:30
- 44Lauren Haase, Sociology, The Effects of a Criminal Background on
Employment, 2:30-4:00
- 45Maureen Carmody, Samantha Trebesch & Troy Robert Bockelmann,
Ag Business, Agriculture in Bangladesh, 3:00-4:30
- 46Bryan Creamer, Sociology, A Glimpse into Motion Pictures and How
Personality Traits of Characters with Disabilities are Portrayed, 2:00-
3:30
- 47Manisha Prajapati, Environmental Science, Observation of Seasonal
Changes in the SMSU Event Center Wetland, 3:30-5:00
- 48Laramie Wynia, Accounting, Is it beneficial to implant beef feeder
cattle? 10:30-12:00
- 49Christy Van Dyke, Accounting, Frequent Flyer Miles Taxation, 9:45-
11:00
- 50Tyler Templer, Accounting, Financial Benefits for the United States to
Switch to the Metric System, 10:30-12:00
- 51Greg Van Ruler, Accounting, The Pros and Cons of Owning a Small
Wind Generator, 10:30-12:00

Poster Presentations Session B

SMSU Bellows Academic Library Plaza (BA 272)

Posters displayed 8:30 am-5:00 pm

Authors available at time listed after title

Academic areas: Interdisciplinary Studies, Psychology

- 52Jordan DeMarre, Haley Jacobsen & Jaclyn Wallace, Interdisciplinary
Studies, Women in Crime, 9:45-11:15
- 53Brianna Brush, Stephanie Vorvick & Whitney Sandven,
Interdisciplinary Studies, Women's Colleges and Co-ed Institutions,
3:00-4:30
- 54Tramel Barnes, Kris Penick, Sandra Castillo & Cynthia Cordova,
Interdisciplinary Studies, Women, Their Bodies and Violence, 9:45-
11:15
- 55Lois Sauck & Chris Lascotte, Interdisciplinary Studies, Paid and
Unpaid Work, 2:30-4:00
- 56Dawn Gartner, Leann Heimer & Alejandro Dominquez,
Interdisciplinary Studies, Legalizing Prostitution, 2:30-4:00
- 57Naomi Scheche, Devin Terry & Kayla Kruger, Interdisciplinary
Studies, Women and Poverty, 9:45-11:15

- 58Morgan Wee, Jennifer Cox, Ashley Peterson & Veronica Esquivel,
Interdisciplinary Studies, The Law Behind Women as Property, 9:45-
11:15
- 59Brianna Brush, Psychology, RateMyProfessor.com Guide to Quality
and Easiness, 1:30-3:00
- 60Alex Gleason & Shyranda Hornick, Psychology, How Drinking is
Associated to Grades, 3:00-4:30
- 61Shannon Marholtz & Ashley Bublitz, Psychology, The Power of
Education in the War Against Mental Illness Stigma, 10:30-12:00
- 62Megan Wilgenbusch, Psychology, Effectiveness of Makeup on a
Waitress, 10:30-12:00
- 63Kimberley Einck, Psychology, The Effects of a Student/Teacher
Sexual Relationship, 9:45-11:15
- 64Cadie Meyer & Kristi Eisenbraun, Psychology, Social Facilitation:
The Effect of Competition, 2:00-3:30
- 65Rachel Trueblood, Psychology, The Relation Between Personality,
Gender, and Classroom Seat Selection, 1:30-3:00
- 66Adam Ogdahl, Psychology, Do Pistols Equal Peace? 1:30-3:00
- 67Catherine Barstow, Psychology, Does Age Affect Level of
Conformity? 3:00-4:30
- 68Rebecca Holmblad, Psychology, Battle of the Classes: Who Drinks
More, 9:45-11:15
- 69Michelle Hoek, Psychology, Gender and Age Differences in College
Students' Attitudes Toward the Young and Old, 10:00-11:30
- 70Justin Nielsen, Psychology, Prayer, Attendance and Religious
Satisfaction, 11:30-1:00
- 71Brianna Brush, Samuel Bonsu & Shannon Mahoney, Psychology,
Cross-Racial Face Recognition, 9:45-11:15
- 72Justin Nielsen & Gena Stevens, Psychology, Effective Learning
Strategies for Test Cramming, 1:00-2:30
- 73Kristina Trembley & Shyranda Hornick, Psychology, Effects of
Instructions to Pay Attention on the Monkey Business Illusion, 9:45-
11:15
- 74Justine Buchman & Kayla Kruger, Psychology, Eyewitness
Testimony: Can it be Trusted? 3:15-4:45
- 75Tyler Wagner & Natasha Drackley, Psychology, Recognizing Your
Name in a Word Scramble, 10:00-11:30
- 76Melissa Pannell & Britton Dyer, Psychology, Everyday Occurrences
and Memory, 3:15-4:45
- 77Sara Raddatz & Catherine Barstow, Psychology, How Much Do We
Miss When We Don't Pay Attention? 9:45-11:15

- 78Stephanie Vorvick & Kayli Timm, Psychology, The Effects of Detail Orientation and Gender on Change Blindness, 1:00-2:30
- 79Corrie Weizel & Tony Ross, Psychology, Effects of Technology on Child Development, 1:00-2:30
- 80Rachel Patnoe, Haley Gudim & Christopher Dehncke, Psychology, Bullying Amongst Elementary-Aged Children: An Analysis from Two Perspectives, 10:30-12:00
- 81Bethany Kruggel, Psychology, What is the Relationship Between Suicide and Gender? 1:00-2:30

Poster Presentations Session C

SMSU Student Center Upper Level (SC 216)

Posters displayed 8:30 am-5:00 pm

Authors available at time listed after title

Academic areas: Accounting, Computer Science, History

- 82Garrett Albright, History, Forensic Science: The History of A Science, 12:30-2:00
- 83Ann Kopitzke, History, Plague of the Black Dog, 12:00-1:30
- 84Julia Viviana Santiago, History, The Empty Pages of History: Everyday Life of Children in the Holocaust, 9:45-11:15
- 85Alexander Wannigman, History, History of Pharmacy, 9:45-11:15
- 86Kyle Berndt, History, Minnesota Volunteers, Early Minnesotan Leaders, 9:45-11:15
- 87Samantha Pehrson, History, The World's First Oil Co-Op, 12:00-1:30
- 88Mitch Dahlke, Accounting, U.S. Government's Need to Control the Deficit, 1:00-2:30
- 89Stephanie Fransen, Accounting, Reporting Tips: Choice or Automatic, 1:00-2:30
- 90Brian Harberts, Accounting, Tired of High Taxes?
- 91Abby Knutson, Accounting, Creative Accounting: Where is the Boundary? 1:00-2:30
- 92Haoua Kombeogo, Accounting, IFRS & U.S.GAAP Convergence: Good or Bad? 1:30-3:00
- 93Brad Lanners, Accounting, Annual Budget vs Rolling Budget, 9:45-11:15
- 94Brian Meling, Accounting, Should GMO Foods be Labeled, 11:00-12:30
- 95Amanda Schmitz, Accounting, The Economic Impact of Hosting the Olympic Games: Is it Worth the Fight? 3:30-5:00

- 96Alex Derringer, Computer Science, Google Maps and Android: Mapping the Marshall Bus Routes, *10:30-11:15; 2:30-3:15
- 97Shane Bass, Computer Science, AndFinance: A Personal Finance Manager for Android Devices, *10:30-11:15; 2:30-3:15
- 98Kweku Kponyoh, Computer Science, Unit Converter, *9:30-10:15; 1:30-2:15
- 99Jacob Harrington & Parker Weihe, Computer Science, Legend of the Blade, *2:30-4:00
- 100Lynn Lafky, Computer Science, School Schedule Program, *9:30-11:00
- 101Missy Mueller, Psychology, Stress in College Students, 2:00-3:30
- 102Lauren Teal, Sociology, Portrayal of GLB in the Media, 10:30-12:00,

*Demonstration in SM 274

Original Works Session A

Student Center Upper Level, Artists next to work 1:00-2:30 pm

Displayed Monday, Dec. 3 through Monday, Dec. 10, 2012

- 1Crystal Severance, Guilt, Box Assemblage
- 2Kiley Beste, Lockout, Box Assemblage
- 3Kao Jong Yang, Equality of Both Husband and Wife Now, Box Assemblage
- 4David Kelsey Bassett, Value Topography
- 5Jayme Plimpton, "Girl," Hole-Punch Collage
- 6Sia Lor, Viewfinder, Still Life