Third Annual
Graduate Student Research Symposium
• Discover • Support • Be Inspired •

Monday, April 12, 2010
Gallagher-Bluedorn Performing Arts Center

Oral Presentations
1:30 - 5:30 pm
Conference Room & Room 30

Poster Presentations
3:30 - 5:30 pm
McElroy Lobby

Creative Performances
6:00 - 8:30 pm
Davis Hall

www.grad.uni.edu/symposium
The UNI Graduate College Presents

Third Annual Graduate Student Research Symposium

- Discover  - Support  - Be Inspired

Table of Contents

Welcome Letter from Dr. Sue Joseph
Page 2

Listing of Judges, Notes
Pages 3 - 4

Oral Presentations
Listed by Room, in Order of Presentation
Pages 5 - 10

Poster Presentations
Listed by College, Program, Last Name
Pages 11 - 18

Creative Performances
Listed in Order of Performance
Pages 19 - 21

Acknowledgements, Past Award Winners
Pages 22 – 23

Alphabetical Listing of Participants
Page 24
Greetings from the Graduate College,

It is my great pleasure to welcome you to the Third Annual Graduate Student Research Symposium at the University of Northern Iowa. This event showcases the depth and breadth of our graduate students’ research and creativity. Graduate education at UNI is recognized regionally, nationally, and internationally for preparing our students to be leaders in professional work and continued graduate study, by committed faculty who are recognized for outstanding teaching, distinguished research, and service to the professions and to the worldwide community.

We are proud to offer graduate students a world-class graduate education with a personalized experience. As an alumna of UNI, both graduate (MA, 1987) and undergraduate (BA, 1981), the education I received here provided me with amazing opportunities. For all of our graduate students who are presenting their work today, I wish you much continued success. And to our graduate faculty and administrators, I thank you for your continued generous commitment to quality graduate education at the University of Northern Iowa.

Sue A. Joseph, Ph.D.
Professor and Interim Dean, Graduate College

---

**2009 Award Recipients**

**Creative Performances**

1\(^{st}\) Place • Sarah Duvel  
**Performance:** Voice (M.M.)  
Advisor: Dr. Jean MacDonald  
*Meyerbeer and Rodrigo: From French Grand Opera to Spanish Love Songs*

2\(^{nd}\) Place • Matthew Andreini  
**Performance:** Percussion (M.M.)  
Advisor: Dr. Randy Hogancamp  
*Emmanuel Séjourné - Concerto pour vibraphone & orchestre à cordes, II. Energetic et Agressif*

3\(^{rd}\) Place • Vladimir Tkachenko  
**Performance:** Viola (M.M.)  
Advisor: Dr. Julia K. Bullard  
*V. Persichetti Parable for Solo Viola #16 op. 130*

**Poster Presentations**

1\(^{st}\) Place • Justin Huisman  
**Biology (M.S.)**  
Advisor: Dr. Daryl Smith  
*The Effects of Planting Methods and Granivory on Seedling Emergence and Establishment in a Tallgrass Prairie Reconstruction*

2\(^{nd}\) Place • John Holding  
**Ecosystem Management (P.S.M.)**  
Advisor: Dr. Laura Jackson  
*Native Perennial Vegetation as a Feedstock for Renewable Energy*

3\(^{rd}\) Place • Maria del Pilar Montoya  
**Communication Studies: Public Relations (M.A.)**  
Advisor: Dr. April Chatham-Carpenter  
*Communication Dimensions of Supervisor-subordinate Conflict: Perceptions by Subordinates of Sex/Gender Differences in Supervisors’ Conflict Strategies*
Acknowledgements

Event Organizers

Susie Schwieger, Director Graduate Student Life
Jaimie Bell, Graduate Assistant
Katherine Brown, Graduate Assistant
Ken Nesbett, Graduate Assistant

Graduate College Staff

Dr. Sue Joseph, Interim Dean
Dr. Shoshanna Coon, Interim Associate Dean for Graduate Academic Affairs
Mary Ann Hesse, Secretary IV
Janet Witt, Thesis/Dissertation Reviewer
Machelle Stickler, Secretary II

Special Thanks

Tom Barry, Assistant Professor, School of Music
Caroline Boehner, Administrative Assistant, School of Music
Dr. Rebecca L. Burkhart, Professor, School of Music
Dr. Judith F. Harrington, Emeritus Professor, Department of Communication Sciences and Disorders
Sandi Ingles, Secretary III, Department of Biology
Chris Kremer, Event Management Director, Gallagher-Bluedorn Performing Arts Center
Kyle Martens, Senior, Communication Studies and Electronic Media
Chuck Pugh, Technical Director and Performance Facilities Manager, School of Music

Judges

Oral Presentation Judges

Dr. Trudy A. Eden, Associate Professor
Department of History

Dr. Judith F. Harrington, Emeritus Professor
Department of Communication Sciences and Disorders

Dr. John W. Johnson, Professor
Department of History

Dr. Michael J. Licari, Interim Head and Associate Professor
Department of Political Science

Dr. Norbert J. Pienta, Professor and Director of Undergraduate Studies
Department of Chemistry / The University of Iowa

Dr. Leslie K. Wilson, Associate Dean and Associate Professor
College of Business Administration

Poster Presentation Judges

Dr. Angela N. Burda, Associate Professor
Department of Communication Sciences and Disorders

Dr. Shoshanna R. Coon, Interim Associate Dean for Graduate Academic Affairs, Graduate College; Associate Professor, Department of Chemistry and Biochemistry

Dr. Kavita R. Dhanwada, Associate Professor
Department of Biology

Dr. Xavier Escandell, Assistant Professor
Department of Sociology, Anthropology and Criminology

Dr. Jennifer J. Waldron, Associate Professor
School of Health, Physical Education, and Leisure Services

Dr. Catherine L. Zeman, Associate Professor
School of Health, Physical Education, and Leisure Services
Creative Performance Judges

Dr. Rebecca L. Burkhardt. Professor
School of Music

Dr. George F. Day. Emeritus Professor
Department of English Language and Literature

Dr. Samuel L. Gladden. Interim Department Head, Department of Modern Languages; Associate Professor, Department of English Language and Literature

John Hagen. B.A. Music 1987,
The Texas Tenors

Dr. James Lubker, Former Provost and Dean, College of Humanities and Fine Arts; Professor, Department of Communication Sciences and Disorders

Dr. Pierre-Damien Mvuyekure. Professor
Department of English Language and Literature

All descriptions are the original work of the presenters.

Capitalization of titles was standardized for inclusion here.

Attendees of Oral Presentations

Please enter only between presentations.

Attendees of Creative Performances:

Please enter only between performances.

Photography and recording are prohibited.

7:55 p.m. • Renée Rapier
Performance: Voice (M.M.)
"Iris Hence Away" from Handel's Semele and Pauline's Aria from Tchaikovsky's Queen of Spades
- Dr. Jean M. McDonald
George Frideric Handel (1685-1759) - "Iris Hence Away" from Semele (1744) - Juno’s virtuosic “rage aria” plotting vengeance against her adulterous husband Jupiter. - Pyotr Ilyich Tchaikovsky (1840-1893) - Pauline’s Aria (“Podrugi miliye”) from The Queen of Spades (1890) - A beautiful but sad ballad, Pauline foreshadows the impending tragedy in her best friend’s life.

8:05 p.m. • Natalia Tokar
Performance: Piano (M.M.)
Etude-tableau in E-flat Minor, Op. 39 #5 by Rachmaninov
- Dr. Sean D. Botkin
This piece is the fifth etude, in E-flat minor, from Sergei Rachmaninov’s “Etudes-tableaux” op. 39. It is among the most popular of Rachmaninov’s works. The piece juxtaposes lyrical melodies with massive chordal textures symbolizing concepts of struggle, death, and resurrection.
Advertisements are a huge influence on how the public gains their knowledge, as students we wanted to create some equal ground to inform the public of their mental health options. The video that will be presented was posted on YouTube to promote awareness of the benefits of counseling.

- 7:00 – 7:15 p.m. • INTERMISSION •

7:15 p.m. • Jenna Hardy Jazz Pedagogy (M.M.)
"Round Midnight," An Improvised Solo Vibraphone Performance"
- Dr. Robert A. Washut
"Round Midnight" is a jazz ballad composed by Thelonious Monk. Jenna Hardy will perform this work, an entirely improvised version of the melody as well as a short improvised solo, for solo vibraphone.

7:25 p.m. • Peter Roberts Music (M.A.)
Fantasy
- Dr. Sean D. Botkin
Fantasy brings together several musical genres including jazz, classical, and popular song. Each of the three sections, The Lingering Dream, Theme of Her and Sunlit Day, has its own melody and brief section of improvisation. The work is based on a vivid dream of the composer/performer Peter Roberts.

7:35 p.m. • Bryan Tank Composition (M.M.), Music History (M.M.)
four songs for soprano
i. and I knew love
ii. seven times (omitted today due to time constraints)
iii. quiet then
iv. and still
- Dr. Jonathan C. Schwabe
Performers: Morgan Horning & Danny White
This work attempts to place the various components of love into a modern context, both textually and musically. Set for piano and voice, with poetry by Kate Ristau, the music intricately portrays love’s fragility through the piano’s restless harmonic and rhythmic progressions and soprano’s wide-ranging and leaping melodies.

7:45 p.m. • Angela Reynolds Performance: Flute (M.M.)
"Fish Are Jumping"
- Dr. Angeleita S. Floyd
Robert Dick’s “Fish Are Jumping” for Flute Alone incorporates a variety of contemporary techniques that imitate western jazz and electric guitar blues. This creative performance consists of an explanation of these innovative special effects and a performance of Robert Dick’s unique composition.

Oral Presentations

Conference Room

1:30 p.m. • Maria Koeppel Criminology (M.A.)
Testing the Selective Chivalry Theory in Iowa: Gender Sentencing of Rural Property Offenders
- Dr. Gayle M. Rhineberger-Dunn
The purpose of this research was to test the selective chivalry theory that claims that female offenders who commit ‘sex role’ crimes, would always be treated more advantageously than male offenders. This theory was tested using property crime data gathered from five rural counties in Iowa.

1:45 p.m. • Teryl Scott French (M.A.)
Women Through the Eyes of Delacroix
- Dr. Deirdre A. Heistad
Although Eugène Delacroix’s paintings, journal entries, and correspondence between 1822 and 1832 generally support contemporaneous bourgeois male assumptions of the weakness and sexual availability of women, in some cases he uses metaphors of movement to subtly suggest the superior moral virtue of women despite their physical inferiority.

2:00 p.m. • Mitchell Patterson Applied Chemistry and Biochemistry (P.S.M.)
Environmentally Friendly Replacements for Foundry Binders
- Dr. Shoshanna R. Coon
Bio-urethane binders were developed for the foundry industry. The novel bio-urethanes drastically reduce emissions by replacing the traditional component containing phenol and formaldehyde, both hazardous air pollutants (HAPs). Rigorous lab testing and foundry trials prove that the new urethanes exhibit ample handling strength and good casting performance with excellent shake-out.

2:15 p.m. • Jennifer Hall Community Health Education (Ed.D.)
Environmental and Occupational Health Disparities of Roma Scavenging Communities in Romania
- Dr. Catherine L. Zeman
This presentation uses an arts-informed qualitative research methodology to explore environmental and occupational health disparities of a Roma scavenging community living and working off a municipal landfill outside Cluj-Napoca, Romania. Multiple environmental and occupational health disparities were revealed and indicate basic human rights concerns and social and environmental injustice.
2:30 p.m. • Dan McCarthy  Psychology: Social Psychology (M.A.)
Examining an Optimal Model of Face Processing Using Eye-tracking
- Dr. Otto H. MacLin
MacLin and MacLin (2008) propose an optimal model of face processing
called the cognitive gating mechanism (CGM). The model was tested using
eye-tracking technology to examine differences in eye-movements for familiar and
unfamiliar faces of African-Americans and Caucasians. Participants viewed
faces from each category and saccades and fixations were recorded.

2:45 p.m. • Jane Johnson  History (M.A.)
Nature's Gift: The Des Moines River The Rise and Fall of Early Towns Along
Its Bank From the Earliest of Times Through the Nineteenth Century
- Dr. Joanne A. Goldman
My topic is the development of river cities along the lower DMR and the
settlement patterns by settlers who used the river, “Nature’s Gift” as a highway.
The DMR was essential to the economic development of the region. A
number of river towns developed a function as centers of trade.

• 3:00 – 3:15 p.m. • BREAK •

3:15 p.m. • Sonja Bock  Sociology (M.A.)
"Removing the Veil": Eliminating Cultural and Racial Bias from Sociological Research
- Dr. Ruth A. Chananie-Hill
This study explores the effects of W.E.B. Du Bois’ theory of the 'veil' on
Dubsonian experts' own interpretations of his life and work. Broader
implications include the question of how the veil affects the research of scholars
who focus on people of color.

3:30 p.m. • Jalloh Abubakarr  Public Policy (M.A.)
The Politics and Culture of Female Genital Circumcision: The Case of Sierra Leone
- Dr. Al Hays
The presentation focuses on the culture and political climate of Female Genital Circumcision, which is predominantly practiced in Africa. Sierra Leone is used
as a case study for an in-depth analysis of the challenges on the cessation of this
practice.

3:45 p.m. • William Burkett  Geography (M.A.)
Utilization of Lidar Data by Iowa Professionals
- Dr. Ramanathan Sugumaran
The project is a two-phase study consisting of an online survey and followup
interviews to assess adoption and potential problems in the use of state acquired
lidar data by Iowa Professionals. Users are finding the data is compatible with
their current systems and are finding few problems.

Creative Performances

6:00 p.m. • Amy Beckhuizen  Performance: Viola (M.M.)
J.S. Bach’s Suite No. 3 in C BWV 1009
- Dr. Julia K. Bullard
Suite No. 3 in C major is one of six suites written by Johann Sebastian Bach for
solo cello. The suites were transcribed for viola in the early twentieth century
and have become an integral part of the repertory over the last one hundred
years.

6:10 p.m. • Lenni Clemens
English: Creative Writing (M.A.)
House For Sale
- Dr. Grant A. Tracey
"House For Sale" is the story of a woman trying to move forward from a
torturous past. Selling her childhood home, a house fraught with horrible
memories seems like a step in the right direction. Touring the house is harder
than expected and Karen relives her awful past.

6:20 p.m. • Isaac Droscha  Performance: Voice (M.M.)
Весь табор спит... (Ves tabar spit) aria from Aleko by Sergei Rachmaninov
- Dr. John T. Hines  Accompanist: Dr. Korey J. Barrett
The Program consists of the aria “Весь табор спит...” (all the camp is
sleeping) from the opera Aleko, 1892, by Sergei Rachmaninov 1873 - 1943.
Aleko contemplates memories of his lover, Zemfira, and revenge for her
unforgivable unfaithfulness.

6:30 p.m. • Cassandra Naaktgeboren
Performance: Voice (M.M.)
La Bonne Cuisine by Leonard Berstein
- Dr. Korey J. Barrett  Accompanist: Dr. Korey J. Barrett
The program consists of Leonard Bernstein’s La Bonne Cuisine: Four Recipes
for Voice and Piano. The four recipes set to music include I. “Plum Pudding,”
II. “La Queue de Boeuf” (Oxtails), III. “Tavouk Gueunksis,” (Turkish Chicken
Breast) and IV. “Civet à Toute Vitesse” (Rabbit at Top Speed).

6:40 p.m. • Pam Klein  English (M.A.)
"The Widening Gyre": Original Poetry on a Modernist Theme
- Dr. Jeremy D. Schraffenberger
My poetry references the dehumanizing chaos, including WWI, that influenced
modernist literature. Such chaos has a less violent incarnation today, though it
still exists in the forms of corporate farming and factory employment. Both
mechanize existence, thus echoing modernist concerns and providing a basis
for my poetry.
Thomas Dirth                                          Psychology: Social Psychology (M.A.)
Ideological Attitude Shifts: Values Affecting Attitudes about Affirmative Action  
- Dr. Helen C. Harton
In having an attitude about a political policy or issue one has a political ideology and a personal value to consider. It is hypothesized that when the two are incongruent because of the frame of argument, a political conservative will experience less shifts in their attitudes then a liberal will.

Zackary Lemka                                          Psychology: Social Psychology (M.A.)
Contagion of Aggression  
- Dr. Helen C. Harton
The current study examined online aggression contagion. 150 undergraduate participants completed aggression questionnaires and took part in an electronic discussion with aggression being modeled to experimental groups. The experimental groups had higher hostility scores than the control groups, and assigned confederates fewer points than other participants.

Diedre Cave                                                Sociology (M.A.)
Similarities and Differences between Children from Divorced Mother Households and Never Married Mother Households  
- Dr. Kristin Y. Mack
This study compares the well-being of children from two types of single parent homes. Previous research has tended to combine divorced families and never married mother families together to make comparisons of single parent families and two-parent families. Results will provide insight for future research on this topic.

Kaitlin Korbitz                                         Women’s and Gender Studies (M.A.)
Fakin’ the Front: the Faces Behind Tattoo Art  
- Dr. Marybeth Stap
Current sociological research regarding body modification culture, specifically tattooing, focuses primarily on the socially deviant nature of this practice. Few pieces of literature delve into the subject of body modification from the perspective of the artist, and even fewer delve into the lives of these artists as serious art creators. This work looks at the perspective of tattoo artists as art creators and what meaning tattoos have symbolically and culturally in the construction of their artwork.

4:00 p.m. • Catherine Brix-Trogdon Spanish (M.A.)
Deeper into the Labyrinth  
- Dr. Deirdre A. Heistad
This presentation analyzes how the fairy tale genre is used in the film Pan’s Labyrinth to demonstrate and critique Spain’s socio-cultural situation following the Spanish Civil War. The film juxtaposes historic events with a fairy tale narrative that suggests a larger moral conflict which spans a greater social context.

4:15 p.m. • Tiffany Walters Biology (M.S.)
Towards Cloning Genes of the Betalain Pathway in Pitayas  
- Dr. Axel Schwekendiek
Pitayas (Hylocereus species) are tropical vine cacti that produce edible fruits. These fruits produce an economically important pigment derived from betalains. The genes that control the production of betalains has not been identified, and that is the purpose of this study.

4:30 p.m. • James Mason Biology (M.S.)
Small Mammal, Bird, and Butterfly Colonization During Early Establishment in a Prairie Biofuel Project  
- Dr. Mark C. Myers
Will biofuel cropping systems using native vegetation provide high quality habitat for wildlife? I conducted surveys at a Black Hawk county site managed for biomass production in 2009. Results indicate that prairie biofuel fields provide habitat for a variety of small mammals, birds, and butterflies, even during first year establishment.

4:45 p.m. • Rachelle Saunders Communication Studies (M.A.)
The Resistance of Scapegoating Through Rhetorical Strategy  
- Dr. Catherine H. Palczewski
Rachelle explores the ways rhetors resist scapegoating. Through the critical examination of a eulogy delivered at the funeral of reformed gang leader, Stanley "Tookie" Williams, Rachelle identifies how the text meets and fails to meet our current expectations of a eulogy while working to resist the process of scapegoating.

5:00 p.m. • Jessica Kettleson Biology (M.S.)
Genetic Transformation of Hops for the Production of Phytopharmaceuticals  
- Dr. Axel Schwekendiek
In this study, I examine the biotechnological production of the anti-cancer compound Xanthohumol in transgenic hop (Humulus Lupulus) by over-expressing structural genes and transcription factor genes in the plant. I expect a significant increase in Xanthohumol content that could boost phytopharmaceutical applications of hop extracts.
5:15 p.m. • Winnie Wong          Leisure, Youth and Human Services (M.A.)  
Jason Lau          Leisure, Youth and Human Services (Ed.D.)  

Strategies for Building Cultural Competence through International Internship  
- Dr. Sam Lankford
Join us for an interactive discussion on building cultural competence through international immersion programs. Learn about the importance of cultural competence and how it affects leadership efforts. Presenters will discuss and identify strategies in the preparation and implementation of international immersion programs.

Classroom 30

1:30 p.m. • Johnanna Ganz          Women’s and Gender Studies (M.A.)  

What’s in a Name? An Examination of the ’Childfree’ Movement  
- Dr. Martha J. Reineke
This paper uses Judith Butler’s conceptions of agency and reclamation to examine the social and political implications of the “childless/childfree” movement. This is a current social and political movement focused on promoting visibility and providing social opportunities to those who voluntarily choose to not have children.

1:45 p.m. • Kaori Yamada          Communication Studies (M.A.)  

Domesticating Police Violence: Analysis of YouTube video and Media Coverage of the Taser Incident at the University of Florida  
- Dr. Catherine H. Palczewski
This presentation modifies the theory of domesticating dissent proposed by John Murphy to analyze how violence, too, can be domesticated. I analyze the taser incident at the University of Florida, now known as ‘Don’t tase me bro’, to explore how the YouTube video and media coverage shifts responsibility for violence from the police to the tased student.

2:00 p.m. • Amanda Green          Teaching English to Speakers of Other Languages (M.A.)  

Increasing Learner Motivation Through the “Ideal Sell”  
- Dr. Tammy S. Gregersen
One language teaching goal is to instill learner independence. Creating an “ideal sell” (i.e., the representation of one’s ideal attributes) by language learners is postulated as an effective means of raising language learning motivation. This study examines whether elaborating an “ideal sell” motivates language learners, leading to increased learner independence.

Matthew Williamson          Psychology: Clinical Science (M.A.)  

Relationship between Motivation and Driving Behaviors  
- Dr. Sunde M. Nesbit
This study looks at different motivational approaches and offers a psychobiobehavioral explanation for the development of aggressive driving behaviors and driving anger. The researcher used writing assignments to manipulate motivation to see if those put into a more goal-orientated mindset reported a greater likelihood of engaging in aggressive driving behaviors.

Elizabeth Perez          Psychology: Individualized Study (M.A.)  

Are Heritable Attitudes Predictors of Voting Behavior?  
- Dr. Helen C. Harton
Political attitudes and voting behaviors of college students living in four residence halls were assessed. We predicted that highly heritable attitudes would predict voting behavior in the 2008 U.S. Presidential Election.

Laura Foster          Psychology: Industrial-Organizational (M.A.)  

Implicit Beliefs and the Research-Practice Gap in Employee Selection  
- Dr. Adam Butler
This survey of university faculty showed that intuitive selection procedures were used more and were generally seen as more valid than analytical procedures. The use of both procedures was predicted by their perceived validity, and there was some evidence that perceived validity was predicted by implicit beliefs about hiring.

Jay Middleton          Psychology: Industrial-Organizational (M.A.)  

Does Previous Exposure to Those With Mental Illness Influence Future Attributions?  
- Dr. Seth A. Brown
The purpose of this study was to investigate whether one’s previous exposure to those with mental illness would lead to lower negative impressions of people with mental illness as described in a vignette where some are described as dangerous. Results indicate that previous exposure did not influence such impressions.

Heather Caspers          Psychology: Social Psychology (M.A.)  

The Effect of Regional Differences on Juror Attitudes and Knowledge  
- Dr. Helen C. Harton
It is important to understand if there are regional differences in attitudes of crime because jurors may have preconceived notions when they serve on a jury. The present study examines national databases concerning attitudes toward crime based on geographic region to investigate the potential relationship between these variables.
Annette Fischels  Environmental Science (M.S.)  
Remote Sensing of the Boundary Layer Using An Ultraviolet Lidar  
- Dr. Alan C. Czarnetzki  
A surface-based lidar will be used to characterize the daytime atmospheric boundary layer in a rural/residential environment during a spring month. Preliminary data demonstrate the utility of backscatter lidar profiles in the analysis of boundary layer structure and quantification of the atmospheric volume through which air pollutants can be mixed.

Mylene Godin  Environmental Science (M.S.)  
Remediation of Water Contaminated with Triphenylmethane and Azo dyes using Selected Physichochemical Processes  
- Dr. John A. Bumpus  
This poster shows the results obtained by different methods of degradation for two dyes. It also shows, when possible, the mechanism of degradation involved.

College of Social and Behavioral Sciences

Ashley Sparks  Psychology: Clinical Science (M.A.)  
Measuring the Criminal Stereotype  
- Dr. Kim MacLin  
A previous investigation about the criminal stereotype was completed on a sample of Hispanic students to determine what images came to mind when they thought of a criminal. Part of the study included the Criminal Stereotypes Questionnaire (MacLin & Herrera, 2006). This study introduces a revised version of the questionnaire including subscales, and new, more specific questions.

Courtney Stufflebeam  Psychology: Clinical Science (M.A.)  
Are You Jealous?: The Relationship between Sexual and Emotional Infidelity and Power  
- Dr. Helen C. Harton  
This study hypothesizes that the individuals who report having more perceived power in a romantic relationship will report more distress over sexual infidelity, and individuals who report having less power will report being more distressed over emotional infidelity, regardless of gender.

Kyle Suhr  Psychology: Clinical Science (M.A.)  
Rumination & Driving Anger  
- Dr. Sunde M. Nesbit  
Evidence supports rumination exacerbating and prolonging emotions like depression, anxiety, and anger after provocation. A significant interaction between gender and rumination upon levels of driving anger is expected in that men high in rumination will also report higher levels of driving anger.

2:15 p.m. • Evgenia Breslav  German (M.A.)  
Hugo von Hofmannsthal’s Language Crisis and the Apocalypse of 1918  
- Dr. Deirdre A. Heistad  
A comprehensive reading of Hugo von Hofmannsthal’s “The Difficult Man” must not limit itself to either a philosophical explanation based solely on Hofmannsthal’s philosophy of ‘language crisis’, or a purely historical interpretation based on early 20th century Viennese aristocratic society, but instead must take into consideration both.

2:30 p.m. • Alina Byzova  German (M.A.)  
The Reader: From the Book to the Film  
- Dr. Deirdre A. Heistad  
My presentation compares Bernhard Schlink’s novel "The Reader"(1995) to its film adaptation by Stephen Daldry (2008). Despite reproducing much of the novel’s plot, the film fails to reproduce the richness of the narrative structure leaving the film open to numerous interpretations, some of which betray the original work’s intent.

2:45 p.m. • Alexandra Kokurina  German (M.A.)  
From Decadent Decline to Artistic Rebirth: A Reading of Thomas Mann’s Earliest Short Stories  
- Dr. Deirdre A. Heistad  
Thomas Mann’s "Little Herr Friedemann" (1896), "Tristan" (1902), "Tonio Kröger" (1903) and "Death in Venice" (1912) reveal the origins and evolution of his vision regarding the role of the artist and his art in the time of decadence, an attitude that is later reflected in his most important novel 'Buddenbrooks'.

- 3:00 – 3:15 p.m. • BREAK •

3:15 p.m. • Matthew Cossoolotto  History (M.A.)  
- Dr. Brian E. Roberts  
One of the most overlooked topics in American Cultural History is the influence of EC Comics on the beginnings of the Counterculture . This presentation will explore the progressivism ideology of EC Comics along explaining its subversive content as well as its influence on the early years of the Counterculture.
3:30 p.m. • Naomi Terbetski  
French (M.A.), Teaching English to Speakers of Other Languages (M.A.)  

*Trilingualism: Language Choice or Policy?*  
- Dr. Tammy S. Gregersen  
This MA research paper considers questions concerning conditions and instances (language choice, language policy, or some combination of the two) under which trilingualism occurs. Case studies, national policy, school standards, and current practices provide evidence and support the argument that the US teachers, researchers, and policy makers must address trilingualism.

3:45 p.m. • Mary Cox  
Ecosystem Management (P.S.M.)  

*Conservation Management Planning*  
- Dr. Laura L. Jackson  
This presentation explores the need for and process of creating conservation management plans for natural areas. The creation process ranges from researching historical documents to using Geographical Information Systems (GIS) technology to analyze and document the landscape.

4:00 p.m. • Dale Yurs  
History (M.A.)  

*Oliver Ellsworth and the Federal Judiciary*  
- Dr. John W. Johnson  
As a Founding Father, Oliver Ellsworth was instrumental in the development of the Federal Judiciary. He participated as a member of the Constitutional Convention, as a U.S. Senator, and served as our nation’s second Chief Justice. Each of these positions allowed him to help define our nation’s Federal Judiciary.

4:15 p.m. • Rebecca Jessen  
French (M.A.)  

*The Role of the Poet in Victor Hugo’s Les Contemplations*  
- Dr. Deirdre A. Heistad  
In spite of some literary critics’ attempts to eliminate the importance of the author in written works, it is my contention that in the case of Victor Hugo’s Les Contemplations (1856), this theory does not hold, given the autobiographical nature of his poetry.

4:30 p.m. • A. Hameed El Madwar  
Doctor of Industrial Technology (D.I.T.)  

*Design and Implementation of a 12 kW Wind-Solar Distributed Power System for enhancing UNI’s Sustainability Efforts*  
- Drs. Recayi (Reg) Pecen & Hong (Jeff) Nie  
The main objective of this proposal is to design and build a 12 kW solar-wind hybrid power station and associated wireless sensors and LabView based monitoring instrumentation systems to provide a teaching and research facility on renewable energy area as well as enhancing campus sustainability efforts and reducing carbon foot print.

4:45 p.m. • Justin Boersma  
Ecosystem Management (P.S.M.)  

*UNI Campus Stormwater Management*  
- Dr. Laura L. Jackson  
We assist in the planning and execution of urban stormwater best management practices on the UNI campus. Examples of our projects and accomplishments are producing a successful grant for a bioretention cell for the ROTH residential complex, stream bank stabilization of Dry Run Creek and various other stormwater mitigation projects.

4:50 p.m. • Ashley Kittle  
Ecosystem Management (P.S.M.)  

*Resource Management Planning*  
- Dr. Laura L. Jackson  
This presentation displays the outcomes of our team’s collaboration with Black Hawk County Conservation to update and create resource management plans for county natural areas. Our areas of focus are in Cedar Falls at Hartman Reserve Nature Center / Hartman Bluff State Preserve, and Cedar Bend Savanna.

5:00 p.m. • Julie Wynia  
Ecosystem Management (P.S.M.)  

*Getting Back to Our Roots: The Underground Life of the Prairie*  
- Dr. Laura L. Jackson  
This presentation shows progress that has been made toward developing a travelling display of preserved perennial roots which will increase awareness of and educate people about the critical ecosystem functions of the roots of native prairie plants.

5:15 p.m. • Matt Frana  
Ecosystem Management (P.S.M.)  

*Investigation of Associations Between Water Quality, Surficial Geology, and Land Use of the Waverly Quadrangle, Iowa*  
- Dr. Maureen Clayton  
Thesis research project conducted to determine the ground and surface water quality of the Waverly Quadrangle, Iowa as determined by nitrate concentration and isotopic analysis. This research was also conducted to better understand associations between water quality, surficial geology, and land use.
Dustin Ebert  
**Biotechnology (P.S.M.)**  
*The Demonizing of GMOs is Hampering Progress Toward Nutritional Food Improvement*

- Dr. Axel Schwekendiek

Traditionally, commercial interest in GMO crops has concentrated on improving yield, not nutrition. This poster describes several recent examples of genetically improving nutritional composition in GMO crops. It also discusses the need to deregulate GMO production to make this economically feasible.

Sufia Munim  
**Biotechnology (P.S.M.)**  
*Farewell Fossil Fuel-Some Considerations on the Impact of Biofuel and Wind Energy on Environment*

- Dr. Axel Schwekendiek

The project deals with biofuel and wind energy and their impact on the environment. In this study we are comparing the two in their relevance towards environment. We address both, advantages and disadvantages by comparing the two technologies.

Tami Reuter  
**Biotechnology (P.S.M.)**  
*GMOs: Pharma Crops, Destroyer of Big Pharma*

- Dr. Axel Schwekendiek

Could pharma crops bring down the cost of pharmaceuticals? This poster explores the industrial potential of pharma crops and concerns about regulations.

Sudeep Shakya  
**Biotechnology (P.S.M.)**  
*Farewell Fossil Fuel - Some Considerations on the Impact of Biofuel and Wind Energy on the Local Economy*

- Dr. Axel Schwekendiek

This poster emphasizes the significance of Wind and Biofuel energy on Iowa’s Economy. Iowa imports more than 90% of its energy (2005), consuming the revenues generated in the state. Wind energy and biofuel can bring about noticeable reliefs in current expenditure and thus protect Iowa’s economy.

Kenan Baltaci  
**Doctor of Industrial Technology (D.I.T.)**  
*Development of a Data Acquisition and Interface Module for a Fuel Cell Power Station*

- Dr. Recayi (Reg) Pecen

This presentation reports design and implementation of a high-resolution, low-cost, and user-friendly data acquisition and interface module for a 500W hydrogen fuel cell power station which provides proper monitoring, measurement and data acquisition of system parameters such as fuel flow, voltage, current, power, pressure, temperature and overall system efficiency.

---

**Poster Presentations**

**College of Education**  
*and*  
**College of Humanities and Fine Arts**

**McKenzie Main**  
**Speech-Language Pathology (M.A.)**  
*International Speech Language Pathology Modular*

- Dr. Ken Bleile

We are creating an educational modular for individuals considering international studies/work with a focus on developing countries. It is designed primarily for communicative sciences and disorders students; however it is structured to be applicable for general university students with similar interests and goals.

**Sara Witte**  
**Speech-Language Pathology (M.A.)**

**Daphne Schuchart**  
**Curriculum and Instruction (Ed.D.)**  
*Meaning-Making During an Early Field Experience: A Literacy Education Professional Development School Perspective*

- Dr. Linda M. Fitzgerald

This study considers how five pre-service teachers, enrolled in a Literacy Education Professional Development School (LEPrDS) initiative, made sense of an early field experience. Each participant responded differently to the initiative, suggesting a complex interplay between pre-service teachers’ sense of self and the cultural and ecological factors of the experience.

**Bin Ruan**  
**Leisure, Youth and Human Services (Ed.D.)**  
*The Application of Bok’s Undergraduate Educational Framework in the Analysis and Acquisition of Core Competencies among Camp Adventure Youth Services Seasonal Staff*

- Dr. Christopher R. Edginton

The purpose of this study was to investigate the growth trajectory of university students in core competencies from entry to exit in the CAYS experience using the Bok’s framework. The core competencies included communication, critical thinking, character development, citizenship, diversity, global understanding, widening of interests, and career and vocational development.
Shisi Zhou                                 Leisure, Youth and Human Services (M.A.)
Winnie Wong                               Leisure, Youth and Human Services (Ed.D.)

**Play and Leisure: Chinese Perspective**
- Dr. Sam Lankford

The purpose of this poster presentation is to compare two studies (Wong, 2008; Zhou, 2010) on leisure and play among the college students in Mainland China and Hong Kong, in terms of definition, importance, benefits, and constraints of leisure and play.

Amy Schoeppner                Special Education: Field Specialization (M.A.E.)
Susie Lund                          Special Education: Field Specialization (M.A.E.)
Ashton Donahue                                        Speech-Language Pathology (M.A.)

**Case Study of an Adapted Literacy Unit**
- Drs. Chris L. Kliewer, Amy H. Staples, Amy J. Petersen, Jennifer L. Garret, & Evette S. Edmister

Through an ongoing interdisciplinary case study, we are using local understanding and presumed competence to adapt literacy lessons for a student with significant disabilities in her sixth grade general education class. The use of technology and alternative communication modes is central in this case study.

Emily Sorensen                                           Speech-Language Pathology (M.A.)

**Cognitive-Linguistic Abilities in Young and Middle-aged Adults**
- Dr. Angela N. Burda

Twenty young and 20 middle-aged adults completed the Ross Information Processing Assessment (RIPA-2), Rey Auditory Verbal Learning Test (RAVLT), Wechsler Working Memory subtest of the Wechsler Memory Scale (WMS-III), and Cognitive Learning Quick Test (CLQT). Statistically significant differences occurred on several subtests of the various subtests, which will be discussed.

**College of Natural Sciences**

Andrew Meyer                                                             Applied Physics (P.S.M.)

**Low-temperature Magnetic Behavior of Melt-spin Gd$_{100-x}$Fe$_x$**
- Dr. Paul M. Shand

This presentation focuses on the magnetic susceptibility and coercivity of melt-spin Gd$_{100-x}$Fe$_x$. Various Iron (Fe) concentrations and wheel speeds were investigated to characterize the magnetic properties of these disordered systems. Results indicate the presence of cluster-glass-like behavior and a strong correlation between coercivity and anisotropy.

Sean Hartnett                                 Biology (M.S.)

**Molecular Effects of Metolachlor on Human Cells**
- Dr. Kavita R. Dhanwada

Cell proliferation assays were performed to determine the effects on growth of metolachlor exposure on human liver cells. Additionally, flow cytometry was used to detect altered cell cycle progression while RT-PCR analysis was performed to study differences in the transcription rate of treated vs. control cells.

Sarah Milogranas                                                                 Biology (M.S.)

**A Regulatory Role for Myosin Light Chain Kinase During Pigment Aggregation in Shrimp Red Chromatophores**
- Dr. John Campbell McNamara, Universidade de São Paulo

Pigment aggregation is induced by red pigment concentrating hormone (RPCH) released into the hemolymph from the eyestalk-sinus gland complex. RPCH causes pigment aggregation via intracellular Ca$^{2+}$ and cGMP cascades that trigger myosin/actin based granule translocation. Here, we inhibit specific cell kinases to evaluate their role in the pigment translocation mechanism.

Laura Whitmore                                                                          Biology (M.S.)

**The Effects of Epigallocatechin Gallate, a Green Tea Compound, on the Migration and Invasion of Human Macrophages**
- Dr. Barton L. Bergquist

Macrophages, white blood cells, release enzymes called matrix metalloproteinases (MMPs) to reach sites of infection. There is evidence that epigallocatechin gallate (EGCG), found in green tea, may inhibit MMPs. I am investigating the effects of EGC on the migration and invasion of human macrophages, processes dependent on MMP activity.

S. Scott Whitmore                                                                      Biology (M.S.)

**Conservation Genetics of the Central Newt in Iowa**
- Dr. Theresa Spradling

The central newt is a small salamander native to the Midwestern United States. Populations in Iowa are restricted to fragmented habitats near the Cedar and Wapsipinicon Rivers. We are currently evaluating the genetic status of newt populations in Iowa in order to identify imperiled populations and to further conservation.

Neha Yadav                                                                                   Biology (M.S.)

**Blood Coagulation Properties in Hibernating and Non-Hibernating Wood Turtles (Glyptemys insculpta)**
- Drs. David K. Saunders & Jeff Tamplin

This study investigates the blood clotting properties of hibernating wood turtles. The time required for mammalian blood to clot increases dramatically in hibernating mammals. To determine if the same is true of turtles, blood coagulation assays are performed on cold, hibernating turtles and compared to warm non-hibernating wood turtles.
Shisi Zhou Leisure, Youth and Human Services (M.A.)
Winnie Wong Leisure, Youth and Human Services (Ed.D.)

Play and Leisure: Chinese Perspective
- Dr. Sam Lankford

The purpose of this poster presentation is to compare two studies (Wong, 2008; Zhou, 2010) on leisure and play among the college students in Mainland China and Hong Kong, in terms of definition, importance, benefits, and constraints of leisure and play.

Amy Schoeppner Special Education: Field Specialization (M.A.E.)
Susie Lund Special Education: Field Specialization (M.A.E.)
Ashton Donahue Speech-Language Pathology (M.A.)

Case Study of an Adapted Literacy Unit
- Drs. Chris L. Kliewer, Amy H. Staples, Amy J. Petersen, Jennifer L. Garret, & Evette S. Edmister

Through an ongoing interdisciplinary case study, we are using local understanding and presumed competence to adapt literacy lessons for a student with significant disabilities in her sixth grade general education class. The use of technology and alternative communication modes is central in this case study.

Emily Sorensen Speech-Language Pathology (M.A.)

Cognitive-Linguistic Abilities in Young and Middle-aged Adults
- Dr. Angela N. Burda

Twenty young and 20 middle-aged adults completed the: Ross Information Processing Assessment (RIPA-2), Rey Auditory Verbal Learning Test (RAVLT), Wechsler Working Memory subtest of the Wechsler Memory Scale (WMS-III), and Cognitive Learning Quick Test (CLQT). Statistically significant differences occurred on several subtests of the various subtests, which will be discussed.

College of Natural Sciences

Andrew Meyer Applied Physics (P.S.M.)

Low-temperature Magnetic Behavior of Melt-spin Gd_{100-x}Fe_{x}
- Dr. Paul M. Shand

This presentation focuses on the magnetic susceptibility and coercivity of melt-spin Gd_{100-x}Fe_{x}. Various Iron (Fe) concentrations and wheel speeds were investigated to characterize the magnetic properties of these disordered systems. Results indicate the presence of cluster-glass-like behavior and a strong correlation between coercivity and anisotropy.

Sean Hartnett Biology (M.S.)
Molecular Effects of Metolachlor on Human Cells
- Dr. Kavita R. Dhanwada

Cell proliferation assays were performed to determine the effects on growth of metolachlor exposure on human liver cells. Additionally, flow cytometry was used to detect altered cell cycle progression while RT-PCR analysis was performed to study differences in the transcription rate of treated vs. control cells.

Sarah Milograna Biology (M.S.)
A Regulatory Role for Myosin Light Chain Kinase During Pigment Aggregation in Shrimp Red Chromatophores
- Dr. John Campbell McNamara, Universidade de São Paulo

Pigment aggregation is induced by red pigment concentrating hormone (RPCH) released into the hemolymph from the eyestalk-sinus gland complex. RPCH causes pigment aggregation via intracellular Ca^{2+} and cGMP cascades that trigger myosin/actin based granule translocation. Here, we inhibit specific cell kinases to evaluate their role in the pigment translocation mechanism.

Laura Whitmore Biology (M.S.)
The Effects of Epigallocatechin Gallate, a Green Tea Compound, on the Migration and Invasion of Human Macrophages
- Dr. Barton L. Bergquist

Macrophages, white blood cells, release enzymes called matrix metalloproteinases (MMPs) to reach sites of infection. There is evidence that epigallocatechin gallate (EGCG), found in green tea, may inhibit MMPs. I am investigating the effects of EGCG on the migration and invasion of human macrophages, processes dependent on MMP activity.

S. Scott Whitmore Biology (M.S.)
Conservation Genetics of the Central Newt in Iowa
- Dr. Theresa Spradling

The central newt is a small salamander native to the Midwestern United States. Populations in Iowa are restricted to fragmented habitats near the Cedar and Wapsipinicon Rivers. We are currently evaluating the genetic status of newt populations in Iowa in order to identify imperiled populations and to further conservation.

Neha Yadav Biology (M.S.)
Blood Coagulation Properties in Hibernating and Non-Hibernating Wood Turtles (Glyptemys insculpta)
- Drs. David K. Saunders & Jeff Tamplin

This study investigates the blood clotting properties of hibernating wood turtles. The time required for mammalian blood to clot increases dramatically in hibernating mammals. To determine if the same is true of turtles, blood coagulation assays are performed on cold, hibernating turtles and compared to warm non-hibernating wood turtles.
Dustin Ebert  
Biotechnology (P.S.M.)  
*The Demonizing of GMOs is Hampering Progress Toward Nutritional Food Improvement*  
- Dr. Axel Schwekendiek  
Traditionally, commercial interest in GMO crops has concentrated on improving yield, not nutrition. This poster describes several recent examples of genetically improving nutritional composition in GMO crops. It also discusses the need to deregulate GMO production to make this economically feasible.

Sufia Munim  
Biotechnology (P.S.M.)  
*Farewell Fossil Fuel-Some Considerationon About the Impact of Biofuel and Wind Energy on Environment*  
- Dr. Axel Schwekendiek  
The project deals with biofuel and wind energy and their impact on the environment. In this study we are comparing the two in their relevance towards environment. We address both, advantages and disadvantages by comparing the two technologies.

Tami Reuter  
Biotechnology (P.S.M.)  
*GMOs: Pharma Crops, Destroyer of Big Pharma*  
- Dr. Axel Schwekendiek  
Could pharma crops bring down the cost of pharmaceuticals? This poster explores the industrial potential of pharma crops and concerns about regulations.

Sudeep Shakya  
Biotechnology (P.S.M.)  
*Farewell Fossil Fuel - Some Considerations on the Impact of Biofuel and Wind Energy on the Local Economy*  
- Dr. Axel Schwekendiek  
This poster emphasizes the significance of Wind and Biofuel energy on Iowa’s Economy. Iowa imports more than 90% of its energy (2005), consuming the revenues generated in the state. Wind energy and biofuel can bring about noticeable reliefs in current expenditure and thus protect Iowa’s economy.

Kenan Baltaci  
Doctor of Industrial Technology (D.I.T.)  
*Development of a Data Acquisition and Interface Module for a Fuel Cell Power Station*  
- Dr. Recayi (Reg) Pecen  
This presentation reports design and implementation of a high-resolution, low-cost, and user-friendly data acquisition and interface module for a 300W hydrogen fuel cell power station which provides proper monitoring, measurement and data acquisition of system parameters such as fuel flow, voltage, current, power, pressure, temperature and overall system efficiency.

---

**Poster Presentations**

**College of Education**  
- **College of Humanities and Fine Arts**

McKenzie Main  
Speech-Language Pathology (M.A.)  
*International Speech Language Pathology Modular*  
- Dr. Ken Bleile  
We are creating an educational modular for individuals considering international studies/work with a focus on developing countries. It is designed primarily for communicative sciences and disorders students; however it is structured to be applicable for general university students with similar interests and goals.

Rebekah Rickels  
Speech-Language Pathology (M.A.)  

Sara Witte  
Speech-Language Pathology (M.A.)  

Daphne Schuchart  
Curriculum and Instruction (Ed.D.)  
*Meaning-Making During an Early Field Experience: A Literacy Education Professional Development School Perspective*  
- Dr. Linda M. Fitzgerald  
This study considers how five pre-service teachers, enrolled in a Literacy Education Professional Development School (LEPrDS) initiative, made sense of an early field experience. Each participant responded differently to the initiative, suggesting a complex interplay between pre-service teachers’ sense of self and the cultural and ecological factors of the experience.

Bin Ruan  
Leisure, Youth and Human Services (Ed.D.)  
*The Application of Bok’s Undergraduate Educational Framework in the Analysis and Acquisition of Core Competencies among Camp Adventure Youth Services Seasonal Staff*  
- Dr. Christopher R. Edginton  
The purpose of this study was to investigate the growth trajectory of university students in core competencies from entry to exit in the CAYS experience using the Bok’s framework. The core competencies included communication, critical thinking, character development, citizenship, diversity, global understanding, widening of interests, and career and vocational development.
3:30 p.m. • Naomi Terbetski
French (M.A.), Teaching English to Speakers of Other Languages (M.A.)

Trilingualism: Language Choice or Policy?
- Dr. Tammy S. Gregersen
This MA research paper considers questions concerning conditions and instances (language choice, language policy, or some combination of the two) under which trilingualism occurs. Case studies, national policy, school standards, and current practices provide evidence and support the argument that the US teachers, researchers, and policy makers must address trilingualism.

3:45 p.m. • Mary Cox
Ecosystem Management (P.S.M.)
Conservation Management Planning
- Dr. Laura L. Jackson
This presentation explores the need for and process of creating conservation management plans for natural areas. The creation process ranges from researching historical documents to using Geographical Information Systems (GIS) technology to analyze and document the landscape.

4:00 p.m. • Dale Yurs
History (M.A.)
Oliver Ellsworth and the Federal Judiciary
- Dr. John W. Johnson
As a Founding Father, Oliver Ellsworth was instrumental in the development of the Federal Judiciary. He participated as a member of the Constitutional Convention, as a U.S. Senator, and served as our nation’s second Chief Justice. Each of these positions allowed him to help define our nation’s Federal Judiciary.

4:15 p.m. • Rebecca Jessen
French (M.A.)
The Role of the Poet in Victor Hugo’s Les Contemplations
- Dr. Deirdre A. Heistad
In spite of some literary critics’ attempts to eliminate the importance of the author in written works, it is my contention that in the case of Victor Hugo’s Les Contemplations (1856), this theory does not hold, given the autobiographical nature of his poetry.

A. Hameed El Madwar
Doctor of Industrial Technology (D.I.T.)
Design and Implementation of a 12 kW Wind-Solar Distributed Power System for enhancing UNI’s Sustainability Efforts
- Drs. Recayi (Reg) Pecen & Hong (Jeff) Nie
The main objective of this proposal is to design and build a 12 kW solar-wind hybrid power station and associated wireless sensors and LabView based monitoring instrumentation systems to provide a teaching and research facility on renewable energy area as well as enhancing campus sustainability efforts and reducing carbon foot print.

Justin Boersma
Ecosystem Management (P.S.M.)
UNI Campus Stormwater Management
- Dr. Laura L. Jackson
We assist in the planning and execution of urban stormwater best management practices on the UNI campus. Examples of our projects and accomplishments are producing a successful grant for a bioretention cell for the ROTH residential complex, stream bank stabilization of Dry Run Creek and various other stormwater mitigation projects.

Bree Castle
Julie Wynia
Ecosystem Management (P.S.M.)
Getting Back to Our Roots: The Underground Life of the Prairie
- Dr. Laura L. Jackson
This presentation shows progress that has been made toward developing a travelling display of preserved perennial roots which will increase awareness of and educate people about the critical ecosystem functions of the roots of native prairie plants.

Matt Frana
Ecosystem Management (P.S.M.)
Resource Management Planning
- Dr. Laura L. Jackson
This presentation displays the outcomes of our team’s collaboration with Black Hawk County Conservation to update and create resource management plans for county natural areas. Our areas of focus are in Cedar Falls at Hartman Reserve Nature Center / Hartman Bluff State Preserve, and Cedar Bend Savanna.

Amanda Clarkson
Environmental Science (M.S.)
Investigation of Associations Between Water Quality, Surficial Geology, and Land Use of the Waverly Quadrangle, Iowa
- Dr. Maureen Clayton
Thesis research project conducted to determine the ground and surface water quality of the Waverly Quadrangle, Iowa as determined by nitrate concentration and isotopic analysis. This research was also conducted to better understand associations between water quality, surficial geology, and land use.
Annette Fischels  
Environmental Science (M.S.)
**Remote Sensing of the Boundary Layer Using An Ultraviolet Lidar**
- Dr. Alan C. Czarnetzki
A surface-based lidar will be used to characterize the daytime atmospheric boundary layer in a rural/residential environment during a spring month. Preliminary data demonstrate the utility of backscatter lidar profiles in the analysis of boundary layer structure and quantification of the atmospheric volume through which air pollutants can be mixed.

Mylene Godin  
Environmental Science (M.S.)
**Remediation of Water Contaminated with Triphenylmethane and Azo dyes using Selected Physichochemical Processes**
- Dr. John A. Bumpus
This poster shows the results obtained by different methods of degradation for two dyes. It also shows, when possible, the mechanism of degradation involved.

**College of Social and Behavioral Sciences**

Ashley Sparks  
Psychology: Clinical Science (M.A.)
**Measuring the Criminal Stereotype**
- Dr. Kim MacLin
A previous investigation about the criminal stereotype was completed on a sample of Hispanic students to determine what images came to mind when they thought of a criminal. Part of the study included the Criminal Stereotypes Questionnaire (MacLin & Herrera, 2006). This study introduces a revised version of the questionnaire including subscales, and new, more specific questions.

Courtney Stufflebeam  
Psychology: Clinical Science (M.A.)
**Are You Jealous?: The Relationship between Sexual and Emotional Infidelity and Power**
- Dr. Helen C. Harton
This study hypothesizes that the individuals who report having more perceived power in a romantic relationship will report more distress over sexual infidelity, and individuals who report having less power will report being more distressed over emotional infidelity, regardless of gender.

Kyle Suhr  
Psychology: Clinical Science (M.A.)
**Rumination & Driving Anger**
- Dr. Sunde M. Nesbit
Evidence supports rumination exacerbating and prolonging emotions like depression, anxiety, and anger after provocation. A significant interaction between gender and rumination upon levels of driving anger is expected in that men high in rumination will also report higher levels of driving anger.

2:15 p.m. • Evgenia Breslav  
German (M.A.)
**Hugo von Hofmannsthal’s Language Crisis and the Apocalypse of 1918**
- Dr. Deirdre A. Heistad
A comprehensive reading of Hugo von Hofmannsthal’s “The Difficult Man” must not limit itself to either a philosophical explanation based solely on Hofmannsthal’s philosophy of ‘language crisis’, or a purely historical interpretation based on early 20th century Viennese aristocratic society, but instead must take into consideration both.

2:30 p.m. • Alina Byzova  
German (M.A.)
**The Reader: From the Book to the Film**
- Dr. Deirdre A. Heistad
My presentation compares Bernhard Schlink’s novel "The Reader"(1995) to its film adaptation by Stephen Daldry (2008). Despite reproducing much of the novel’s plot, the film fails to reproduce the richness of the narrative structure leaving the film open to numerous interpretations, some of which betray the original work’s intent.

2:45 p.m. • Alexandra Kokurina  
German (M.A.)
**From Decadent Decline to Artistic Rebirth: A Reading of Thomas Mann’s Earliest Short Stories**
- Dr. Deirdre A. Heistad
Thomas Mann’s "Little Herr Friedemann" (1896), "Tristan" (1902), "Tonio Kröger" (1903) and "Death in Venice" (1912) reveal the origins and evolution of his vision regarding the role of the artist and his art in the time of decadence, an attitude that is later reflected in his most important novel 'Buddenbrooks'.

* 3:00 – 3:15 p.m. • BREAK •

3:15 p.m. • Matthew Cossolotto  
History (M.A.)
- Dr. Brian E. Roberts
One of the most overlooked topics in American Cultural History is the influence of EC Comics on the beginnings of the Counterculture. This presentation will explore the progressivism ideology of EC Comics along explaining its subversive content as well as its influence on the early years of the Counterculture.
5:15 p.m. Winnie Wong Leisure, Youth and Human Services (M.A.)
Jason Lau Leisure, Youth and Human Services (Ed.D.)
Strategies for Building Cultural Competence through International Internship
- Dr. Sam Lankford
Join us for an interactive discussion on building cultural competence through international immersion programs. Learn about the importance of cultural competence and how it affects leadership efforts. Presenters will discuss and identify strategies in the preparation and implementation of international immersion programs.

Classroom 30

1:30 p.m. Johnanna Ganz Women’s and Gender Studies (M.A.)
What’s in a Name? An Examination of the “Childfree” Movement
- Dr. Martha J. Reineke
This paper uses Judith Butler’s conceptions of agency and reclamation to examine the social and political implications of the “childless/childfree” movement. This is a current social and political movement focused on promoting visibility and providing social opportunities to those who voluntarily choose to not have children.

1:45 p.m. Kaori Yamada Communication Studies (M.A.)
Domesticating Police Violence: Analysis of YouTube video and Media Coverage of the Taser Incident at the University of Florida
- Dr. Catherine H. Palczewski
This presentation modifies the theory of domesticating dissent proposed by John Murphy to analyze how violence, too, can be domesticated. I analyze the taser incident at the University of Florida, now known as “Don't tase me bro”, to explore how the YouTube video and media coverage shifts responsibility for violence from the police to the tased student.

2:00 p.m. Amanda Green Teaching English to Speakers of Other Languages (M.A.)
Increasing Learner Motivation Through the “Ideal Sell”
- Dr. Tammy S. Gregersen
One language teaching goal is to instill learner independence. Creating an “ideal sell” (i.e., the representation of one’s ideal attributes) by language learners is postulated as an effective means of raising language learning motivation. This study examines whether elaborating an “ideal sell” motivates language learners, leading to increased learner independence.

Matthew Williamson Psychology: Clinical Science (M.A.)
Relationship between Motivation and Driving Behaviors
- Dr. Sunde M. Nesbit
This study looks at different motivational approaches and offers a psychobiobehavioral explanation for the development of aggressive driving behaviors and driving anger. The researcher used writing assignments to manipulate motivation to see if those put into a more goal-orientated mindset reported a greater likelihood of engaging in aggressive driving behaviors.

Elizabeth Perez Psychology: Individualized Study (M.A.)
Are Heritable Attitudes Predictors of Voting Behavior?
- Dr. Helen C. Harton
Political attitudes and voting behaviors of college students living in four residence halls were assessed. We predicted that highly heritable attitudes would predict voting behavior in the 2008 U.S. Presidential Election.

Laura Foster Psychology: Industrial-Organizational (M.A.)
Implicit Beliefs and the Research-Practice Gap in Employee Selection
- Dr. Adam Butler
This survey of university faculty showed that intuitive selection procedures were used more and were generally seen as more valid than analytical procedures. The use of both procedures was predicted by their perceived validity, and there was some evidence that perceived validity was predicted by implicit beliefs about hiring.

Jay Middleton Psychology: Industrial-Organizational (M.A.)
Does Previous Exposure to Those With Mental Illness Influence Future Attributions?
- Dr. Seth A. Brown
The purpose of this study was to investigate whether one’s previous exposure to those with mental illness would lead to lower negative impressions of people with mental illness as described in a vignette where some are described as dangerous. Results indicate that previous exposure did not influence such impressions.

Heather Caspers Psychology: Social Psychology (M.A.)
The Effect of Regional Differences on Juror Attitudes and Knowledge
- Dr. Helen C. Harton
It is important to understand if there are regional differences in attitudes of crime because jurors may have preconceived notions when they serve on a jury. The present study examines national databases concerning attitudes toward crime based on geographic region to investigate the potential relationship between these variables.
Thomas Dirth                                          Psychology: Social Psychology (M.A.)
Ideological Attitude Shifts: Values Affecting Attitudes about Affirmative Action
- Dr. Helen C. Harton
In having an attitude about a political policy or issue one has a political ideology and a personal value to consider. It is hypothesized that when the two are incongruent because of the frame of argument, a political conservative will experience less shifts in their attitudes then a liberal will.

Zackary Lemka                                          Psychology: Social Psychology (M.A.)
Contagion of Aggression
- Dr. Helen C. Harton
The current study examined online aggression contagion. 150 undergraduate participants completed aggression questionnaires and took part in an electronic discussion with aggression being modeled to experimental groups. The experimental groups had higher hostility scores than the control groups, and assigned confederates fewer points than other participants.

Diedre Cave                                          Sociology (M.A.)
Similarities and Differences between Children from Divorced Mother Households and Never Married Mother Households
- Dr. Kristin Y. Mack
This study compares the well-being of children from two types of single parent homes. Previous research has tended to combine divorced families and never married mother families together to make comparisons of single parent families and two-parent families. Results will provide insight for future research on this topic.

Kaitlin Korbitz                                          Women’s and Gender Studies (M.A.)
Fakin’ the Front: the Faces Behind Tattoo Art
- Dr. Marybeth Stalp
Current sociological research regarding body modification culture, specifically tattooing, focuses primarily on the socially deviant nature of this practice. Few pieces of literature delve into the subject of body modification from the perspective of the artist, and even fewer delve into the lives of these artists as serious art creators. This work looks at the perspective of tattoo artists as art creators and what meaning tattoos have symbolically and culturally in the construction of their artwork.

4:00 p.m. • Catherine Brix-Trogdon                      Spanish (M.A.)
Deeper into the Labyrinth
- Dr. Deirdre A. Heistad
This presentation analyzes how the fairy tale genre is used in the film Pan’s Labyrinth to demonstrate and critique Spain’s socio-cultural situation following the Spanish Civil War. The film juxtaposes historic events with a fairy tale narrative that suggests a larger moral conflict which spans a greater social context.

4:15 p.m. • Tiffany Walters                          Biology (M.S.)
Towards Cloning Genes of the Betalain Pathway in Pitayas
- Dr. Axel Schwekendiek
Pitayas (Hylocereus species) are tropical vine cacti that produce edible fruits. These fruits produce an economically important pigment derived from betalains. The genes that control the production of betalains has not been identified, and that is the purpose of this study.

4:30 p.m. • James Mason                          Biology (M.S.)
Small Mammal, Bird, and Butterfly Colonization During Early Establishment in a Prairie Biofuel Project
- Dr. Mark C. Myers
Will biofuel cropping systems using native vegetation provide high quality habitat for wildlife? I conducted surveys at a Black Hawk county site managed for biomass production in 2009. Results indicate that prairie biofuel fields provide habitat for a variety of small mammals, birds, and butterflies, even during first year establishment.

4:45 p.m. • Rachelle Saunders                      Communication Studies (M.A.)
The Resistance of Scapegoating Through Rhetorical Strategy
- Dr. Catherine H. Palczewski
Rachelle explores the ways rhetors resist scapegoating. Through the critical examination of a eulogy delivered at the funeral of reformed gang leader, Stanley "Tookie" Williams, Rachelle identifies how the text meets and fails to meet our current expectations of a eulogy while working to resist the process of scapegoating.

5:00 p.m. • Jessica Kettleson                          Biology (M.S.)
Genetic Transformation of Hops for the Production of Phytopharmaceuticals
- Dr. Axel Schwekendiek
In this study, I examine the biotechnological production of the anti-cancer compound Xanthohumol in transgenic hop (Humulus Lupulus) by over-expressing structural genes and transcription factor genes in the plant. I expect a significant increase in Xanthohumol content that could boost phytopharmaceutical applications of hop extracts.
2:30 p.m. • Dan McCarthy  Psychology: Social Psychology (M.A.)  
*Examining an Optimal Model of Face Processing Using Eye-tracking*
- Dr. Otto H. MacLin
  
MacLin and MacLin (2008) propose an optimal model of face processing called the cognitive gating mechanism (CGM). The model was tested using eye-tracking technology to examine differences in eye-movements for familiar and unfamiliar faces of African-Americans and Caucasians. Participants viewed faces from each category and saccades and fixations were recorded.

2:45 p.m. • Jane Johnson  History (M.A.)
*Nature’s Gift: The Des Moines River The Rise and Fall of Early Towns Along Its Bank From the Earliest of Times Through the Nineteenth Century*
- Dr. Joanne A. Goldman
  
My topic is the development of river cities along the lower DMR and the settlement patterns by settlers who used the river, “Nature’s Gift” as a highway. The DMR was essential to the economic development of the region. A number of river towns developed a function as centers of trade.

3:00 – 3:15 p.m. • BREAK •

3:15 p.m. • Sonja Bock  Sociology (M.A.)
*"Removing the Veil": Eliminating Cultural and Racial Bias from Sociological Research“*
- Dr. Ruth A. Chananie-Hill
  
This study explores the effects of W.E.B. Du Bois’ theory of the ‘veil’ on Dubsonian experts’ own interpretations of his life and work. Broader implications include the question of how the veil affects the research of scholars who focus on people of color.

3:30 p.m. • Jalloh Abubakarr  Public Policy (M.A.)
*The Politics and Culture of Female Genital Circumcision: The Case of Sierra Leone*
- Dr. Al Hays
  
The presentation focuses on the culture and political climate of Female Genital Circumcision, which is predominantly practiced in Africa. Sierra Leone is used as a case study for an in-depth analysis of the challenges on the cessation of this practice.

3:45 p.m. • William Burkett  Geography (M.A.)
*Utilization of Lidar Data by Iowa Professionals*
- Dr. Ramanathan Sugumaran
  
The project is a two-phase study consisting of an online survey and followup interviews to assess adoption and potential problems in the use of state acquired lidar data by Iowa Professionals. Users are finding the data is compatible with their current systems and are finding few problems.

---

**Creative Performances**

6:00 p.m. • Amy Beckhuizen  Performance: Viola (M.M.)
*J.S. Bach’s Suite No. 3 in C BWV 1009*
- Dr. Julia K. Bullard
  
Suite No. 3 in C major is one of six suites written by Johann Sebastian Bach for solo cello. The suites were transcribed for viola in the early twentieth century and have become an integral part of the repertory over the last one hundred years.

6:10 p.m. • Lenni Clemmons  English: Creative Writing (M.A.)
*House For Sale*
- Dr. Grant A. Tracey
  
"House For Sale" is the story of a woman trying to move forward from a tortuous past. Selling her childhood home, a house fraught with horrible memories seems like a step in the right direction. Touring the house is harder than expected and Karen relives her awful past.

6:20 p.m. • Isaac Droscha  Performance: Voice (M.M.)
*Весь табор спит... (Ves tabar spit) aria from Aleko by Sergei Rachmaninov*
- Dr. John T. Hines  Accompanist: Dr. Korey J. Barrett
  
The Program consists of the aria “Весь табор спит...” (all the camp is sleeping) from the opera Aleko, 1892, by Sergei Rachmaninov 1873 - 1943. Aleko contemplates memories of his lover, Zemfira, and revenge for her unforgivable unfaithfulness.

6:30 p.m. • Cassandra Naaktgeboren  Performance: Voice (M.M.)
*La Bonne Cuisine by Leonard Berstein*
- Dr. Korey J. Barrett  Accompanist: Dr. Korey J. Barrett
  
The program consists of Leonard Bernstein’s  *La Bonne Cuisine*: Four Recipes for Voice and Piano. The four recipes set to music include I. “Plum Pudding,” II. “La Queue de Boeuf” (Oxtails), III. “Tavouk Gueunksis,” (Turkish Chicken Breast) and IV. “Civet à Toute Vitesse” (Rabbit at Top Speed).

6:40 p.m. • Pam Klein  English (M.A.)
*"The Widening Gyre": Original Poetry on a Modernist Theme*
- Dr. Jeremy D. Schraffenberger
  
My poetry references the dehumanizing chaos, including WWI, that influenced modernist literature. Such chaos has a less violent incarnation today, though it still exists in the forms of corporate farming and factory employment. Both mechanize existence, thus echoing modernist concerns and providing a basis for my poetry.
Advertisements are a huge influence on how the public gains their knowledge, as students we wanted to create some equal ground to inform the public of their mental health options. The video that will be presented was posted on YouTube to promote awareness of the benefits of counseling.

7:00 – 7:15 p.m. • INTERMISSION •

7:15 p.m. • Jenna Hardy

Jazz Pedagogy (M.M.)

"Round Midnight," An Improvised Solo Vibraphone Performance"
- Dr. Robert A. Washut

"Round Midnight" is a jazz ballad composed by Thelonious Monk. Jenna Hardy will perform this work, an entirely improvised version of the melody as well as a short improvised solo, for solo vibraphone.

7:25 p.m. • Peter Roberts

Music (M.A.)

Fantasy
- Dr. Sean D. Botkin

Fantasy brings together several musical genres including jazz, classical, and popular song. Each of the three sections, The Lingering Dream, Theme of Her and Sunlit Day, has its own melody and brief section of improvisation. The work is based on a vivid dream of the composer/performer Peter Roberts.

7:35 p.m. • Bryan Tank

Composition (M.M.), Music History (M.M.)

four songs for soprano
  i. and I knew love
  ii. seven times (omitted today due to time constraints)
  iii. quiet then
  iv. and still
- Dr. Jonathan C. Schwabe

Performers: Morgan Horning & Danny White

This work attempts to place the various components of love into a modern context, both textually and musically. Set for piano and voice, with poetry by Kate Ristau, the music intricately portrays love’s fragility through the piano’s restless harmonic and rhythmic progressions and soprano’s wide-ranging and leaping melodies.

7:45 p.m. • Angela Reynolds

Performance: Flute (M.M.)

An Exploration of Extended Techniques for the Flute, through Robert Dick’s "Fish Are Jumping"
- Dr. Angeleita S. Floyd

Robert Dick’s "Fish Are Jumping" for Flute Alone incorporates a variety of contemporary techniques that imitate western jazz and electric guitar blues. This creative performance consists of an explanation of these innovative special effects and a performance of Robert Dick’s unique composition.
Creative Performance Judges

Dr. Rebecca L. Burkhardt. Professor
School of Music

Dr. George F. Day. Emeritus Professor
Department of English Language and Literature

Dr. Samuel L. Gladden. Interim Department Head, Department of
Modern Languages; Associate Professor, Department of English Language
and Literature

John Hagen. B.A. Music 1987,
The Texas Tenors

Dr. James Lubker, Former Provost and Dean, College of Humanities and
Fine Arts; Professor, Department of Communication Sciences and
Disorders

Dr. Pierre-Damien Mvuyekure. Professor
Department of English Language and Literature

7:55 p.m. • Renée Rapier
Performance: Voice (M.M.)
'Iris Hence Away' from Handel's Semele and Pauline's Aria from Tchaikovsky's Queen of Spades
- Dr. Jean M. McDonald
George Frideric Handel (1685-1759) - “Iris Hence Away” from Semele (1744) - Juno’s virtuosic “rage aria” plotting vengeance against her adulterous husband Jupiter. - Pyotr Ilyich Tchaikovsky (1840-1893) - Pauline’s Aria (“Podrugi miliye”) from The Queen of Spades (1890) - A beautiful but sad ballad, Pauline foreshadows the impending tragedy in her best friend’s life.

8:05 p.m. • Natalia Tokar
Performance: Piano (M.M.)
Etude-tableau in E-flat Minor, Op. 39 #5 by Rachmaninov
- Dr. Sean D. Botkin
This piece is the fifth etude, in E-flat minor, from Sergei Rachmaninov’s “Etudes-tableaux” op. 39. It is among the most popular of Rachmaninov’s works. The piece juxtaposes lyrical melodies with massive chordal textures symbolizing concepts of struggle, death, and resurrection.

Notes

All descriptions are the original work of the presenters.
Capitalization of titles was standardized for inclusion here.

Attendees of Oral Presentations
Please enter only between presentations.

Attendees of Creative Performances:
Please enter only between performances.
Photography and recording are prohibited.
Acknowledgements

Event Organizers

Susie Schwieger, Director Graduate Student Life
Jaimie Bell, Graduate Assistant
Katherine Brown, Graduate Assistant
Ken Nesbett, Graduate Assistant

Graduate College Staff

Dr. Sue Joseph, Interim Dean
Dr. Shoshanna Coon, Interim Associate Dean for Graduate Academic Affairs
Mary Ann Hesse, Secretary IV
Janet Witt, Thesis/Dissertation Reviewer
Machelle Stickler, Secretary II

Special Thanks

Tom Barry, Assistant Professor, School of Music
Caroline Boehmer, Administrative Assistant, School of Music
Dr. Rebecca L. Burhardt, Professor, School of Music
Dr. Judith F. Harrington, Emeritus Professor, Department of Communication Sciences and Disorders
Sandi Ingles, Secretary III, Department of Biology
Chris Kremer, Event Management Director, Gallagher-Bluedorn Performing Arts Center
Kyle Martens, Senior, Communication Studies and Electronic Media
Chuck Pugh, Technical Director and Performance Facilities Manager, School of Music

Judges

Oral Presentation Judges

Dr. Trudy A. Eden, Associate Professor
Department of History

Dr. Judith F. Harrington, Emeritus Professor
Department of Communication Sciences and Disorders

Dr. John W. Johnson, Professor
Department of History

Dr. Michael J. Licari, Interim Head and Associate Professor
Department of Political Science

Dr. Norbert J. Pienta, Professor and Director of Undergraduate Studies
Department of Chemistry / The University of Iowa

Dr. Leslie K. Wilson, Associate Dean and Associate Professor
College of Business Administration

Poster Presentation Judges

Dr. Angela N. Burda, Associate Professor
Department of Communication Sciences and Disorders

Dr. Shoshanna R. Coon, Interim Associate Dean for Graduate Academic Affairs, Graduate College; Associate Professor, Department of Chemistry and Biochemistry

Dr. Kavita R. Dhanwada, Associate Professor
Department of Biology

Dr. Xavier Escandell, Assistant Professor
Department of Sociology, Anthropology and Criminology

Dr. Jennifer J. Waldron, Associate Professor
School of Health, Physical Education, and Leisure Services

Dr. Catherine L. Zeman, Associate Professor
School of Health, Physical Education, and Leisure Services
Greetings from the Graduate College,

It is my great pleasure to welcome you to the Third Annual Graduate Student Research Symposium at the University of Northern Iowa. This event showcases the depth and breadth of our graduate students’ research and creativity. Graduate education at UNI is recognized regionally, nationally, and internationally for preparing our students to be leaders in professional work and continued graduate study, by committed faculty who are recognized for outstanding teaching, distinguished research, and service to the professions and to the worldwide community.

We are proud to offer graduate students a world-class graduate education with a personalized experience. As an alumna of UNI, both graduate (MA, 1987) and undergraduate (BA, 1981), the education I received here provided me with amazing opportunities. For all of our graduate students who are presenting their work today, I wish you much continued success. And to our graduate faculty and administrators, I thank you for your continued generous commitment to quality graduate education at the University of Northern Iowa.

Sue A. Joseph, Ph.D.
Professor and Interim Dean, Graduate College

---

2009 Award Recipients

Creative Performances

1st Place • Sarah Duvel
Performance: Voice (M.M.)
Advisor: Dr. Jean MacDonald
*Meyerbeer and Rodrigo: From French Grand Opera to Spanish Love Songs*

2nd Place • Matthew Andreini
Performance: Percussion (M.M.)
Advisor: Dr. Randy Hogancamp
*Emmanuel Séjourné - Concerto pour vibraphone & orchestre à cordes, II. Energetic et Agressif*

3rd Place • Vladimir Tkachenko
Performance: Viola (M.M.)
Advisor: Dr. Julia K. Bullard
*V. Persichetti Parable for Solo Viola #16 op. 130*

Poster Presentations

1st Place • Justin Huisman
Biology (M.S.)
Advisor: Dr. Daryl Smith
*The Effects of Planting Methods and Granivory on Seedling Emergence and Establishment in a Tallgrass Prairie Reconstruction*

2nd Place • John Holding
Ecosystem Management (P.S.M.)
Advisor: Dr. Laura Jackson
*Native Perennial Vegetation as a Feedstock for Renewable Energy*

3rd Place • Maria del Pilar Montoya
Communication Studies: Public Relations (M.A.)
Advisor: Dr. April Chatham-Carpenter
*Communication Dimensions of Supervisor-subordinate Conflict: Perceptions by Subordinates of Sex/Gender Differences in Supervisors’ Conflict Strategies*
### Alphabetical Listing of Participants

<table>
<thead>
<tr>
<th>Name</th>
<th>Page Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abubakarr, Jalloh</td>
<td>6</td>
</tr>
<tr>
<td>Baltaci, Kenan</td>
<td>14</td>
</tr>
<tr>
<td>Beekhuizen, Amy</td>
<td>19</td>
</tr>
<tr>
<td>Bock, Sonja</td>
<td>6</td>
</tr>
<tr>
<td>Boersma, Justin</td>
<td>15</td>
</tr>
<tr>
<td>Breslav, Evgenia</td>
<td>9</td>
</tr>
<tr>
<td>Brix-Trogdon, Catherine</td>
<td>7</td>
</tr>
<tr>
<td>Burkett, William</td>
<td>6</td>
</tr>
<tr>
<td>Byzova, Alina</td>
<td>9</td>
</tr>
<tr>
<td>Caspers, Heather</td>
<td>17</td>
</tr>
<tr>
<td>Castle, Bree</td>
<td>15</td>
</tr>
<tr>
<td>Cave, Diedre</td>
<td>18</td>
</tr>
<tr>
<td>Clarkson, Amanda</td>
<td>15</td>
</tr>
<tr>
<td>Clemons, Lenni</td>
<td>19</td>
</tr>
<tr>
<td>Cossofotto, Matthew</td>
<td>9</td>
</tr>
<tr>
<td>Cox, Mary</td>
<td>10</td>
</tr>
<tr>
<td>DeVries, Jennifer</td>
<td>20</td>
</tr>
<tr>
<td>Dirth, Thomas</td>
<td>18</td>
</tr>
<tr>
<td>Donahue, Ashton</td>
<td>12</td>
</tr>
<tr>
<td>Droscha, Isaac</td>
<td>19</td>
</tr>
<tr>
<td>Ebert, Dustin</td>
<td>14</td>
</tr>
<tr>
<td>El Madwar, A. Hameed</td>
<td>15</td>
</tr>
<tr>
<td>Fischels, Annette</td>
<td>16</td>
</tr>
<tr>
<td>Foster, Laura</td>
<td>17</td>
</tr>
<tr>
<td>Frana, Matt</td>
<td>15</td>
</tr>
<tr>
<td>Ganz, Johnanna</td>
<td>8</td>
</tr>
<tr>
<td>Godin, Mylene</td>
<td>16</td>
</tr>
<tr>
<td>Green, Amanda</td>
<td>8</td>
</tr>
<tr>
<td>Hall, Jennifer</td>
<td>5</td>
</tr>
<tr>
<td>Hardy, Jenna</td>
<td>20</td>
</tr>
<tr>
<td>Hartnett, Sean</td>
<td>13</td>
</tr>
<tr>
<td>Jessen, Rebecca</td>
<td>10</td>
</tr>
<tr>
<td>Johnson, Jane</td>
<td>6</td>
</tr>
<tr>
<td>Kettlestone, Jessica</td>
<td>7</td>
</tr>
<tr>
<td>Kittle, Ashley</td>
<td>15</td>
</tr>
<tr>
<td>Klein, Pam</td>
<td>19</td>
</tr>
<tr>
<td>Koeppel, Maria</td>
<td>5</td>
</tr>
<tr>
<td>Kokurina, Alexandra</td>
<td>9</td>
</tr>
<tr>
<td>Korbitz, Kaithin</td>
<td>18</td>
</tr>
<tr>
<td>Lau, Jason</td>
<td>8</td>
</tr>
<tr>
<td>Lemka, Zackary</td>
<td>18</td>
</tr>
<tr>
<td>Lund, Susie</td>
<td>12</td>
</tr>
<tr>
<td>Main, McKenzie</td>
<td>11</td>
</tr>
<tr>
<td>Mason, James</td>
<td>7</td>
</tr>
<tr>
<td>McCarthy, Dan</td>
<td>6</td>
</tr>
<tr>
<td>Meyer, Andrew</td>
<td>12</td>
</tr>
<tr>
<td>Middleton, Jay</td>
<td>17</td>
</tr>
<tr>
<td>Milgrana, Sarah</td>
<td>13</td>
</tr>
<tr>
<td>Munin, Sufia</td>
<td>14</td>
</tr>
<tr>
<td>Naaktgeboren, Cassandra</td>
<td>19</td>
</tr>
<tr>
<td>Patterson, Mitchell</td>
<td>5</td>
</tr>
<tr>
<td>Perez, Elizabeth</td>
<td>17</td>
</tr>
<tr>
<td>Rapier, Renee</td>
<td>21</td>
</tr>
<tr>
<td>Reuter, Tam</td>
<td>14</td>
</tr>
<tr>
<td>Reynolds, Angela</td>
<td>20</td>
</tr>
<tr>
<td>Rickels, Rebekah</td>
<td>11</td>
</tr>
<tr>
<td>Roberts, Peter</td>
<td>20</td>
</tr>
<tr>
<td>Ruan, Bin</td>
<td>11</td>
</tr>
<tr>
<td>Saunders, Rachelle</td>
<td>7</td>
</tr>
<tr>
<td>Schoepffer, Amy</td>
<td>12</td>
</tr>
<tr>
<td>Schuchart, Daphne</td>
<td>11</td>
</tr>
<tr>
<td>Scott, Teryl</td>
<td>5</td>
</tr>
<tr>
<td>Shakya, Sudeep</td>
<td>14</td>
</tr>
<tr>
<td>Sorensen, Emily</td>
<td>12</td>
</tr>
<tr>
<td>Sparks, Ashley</td>
<td>16</td>
</tr>
<tr>
<td>Stufflebeam, Courtney</td>
<td>16</td>
</tr>
<tr>
<td>Suhr, Kyle</td>
<td>16</td>
</tr>
<tr>
<td>Tank, Bryan</td>
<td>20</td>
</tr>
<tr>
<td>Terbetski, Naomi</td>
<td>10</td>
</tr>
<tr>
<td>Tokar, Natalia</td>
<td>21</td>
</tr>
<tr>
<td>Walters, Tiffany</td>
<td>7</td>
</tr>
<tr>
<td>Whitmore, Laura</td>
<td>13</td>
</tr>
<tr>
<td>Whitmore, S. Scott</td>
<td>13</td>
</tr>
<tr>
<td>Williamson, Matthew</td>
<td>17</td>
</tr>
<tr>
<td>Witte, Sara</td>
<td>11</td>
</tr>
<tr>
<td>Wong, Winnie</td>
<td>8, 12</td>
</tr>
<tr>
<td>Wynia, Julie</td>
<td>15</td>
</tr>
<tr>
<td>Yadav, Neha</td>
<td>13</td>
</tr>
<tr>
<td>Yamada, Kaori</td>
<td>8</td>
</tr>
<tr>
<td>Yurs, Dale</td>
<td>10</td>
</tr>
<tr>
<td>Zhou, Shisi</td>
<td>12</td>
</tr>
</tbody>
</table>