Undergraduate Research Day
A Celebration of Research, Scholarship, and Creativity

2013
Tuesday, April 16 and Wednesday, April 17 • University Union

Tuesday, April 16
Keynote Address and Podium Presentations

6:00-6:15 PM  Welcome and Opening Remarks
              Prairie Lounge

6:15-6:30 PM  Distinguished Alumni Keynote Address
              Alex Heuer, Class of 2008

6:30-8:30 PM  Podium Presentations

Wednesday, April 17
Performance and Poster Presentations

10:30 AM-12:00 PM  Performance Presentations
                    Prairie Lounge

12:00-12:15 PM  Welcome and Remarks

12:30-2:00 PM  Poster Presentations
                Grand Ballroom
<table>
<thead>
<tr>
<th>Alphabetically by Principal Presenter</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A 5</strong></td>
</tr>
<tr>
<td><strong>A 6</strong></td>
</tr>
<tr>
<td><strong>A 7</strong></td>
</tr>
<tr>
<td><strong>A 8</strong></td>
</tr>
<tr>
<td><strong>A 9</strong></td>
</tr>
<tr>
<td><strong>C 47</strong></td>
</tr>
<tr>
<td><strong>C 46</strong></td>
</tr>
<tr>
<td><strong>C 61</strong></td>
</tr>
<tr>
<td><strong>C 138</strong></td>
</tr>
<tr>
<td><strong>C 90</strong></td>
</tr>
<tr>
<td><strong>C 91</strong></td>
</tr>
<tr>
<td><strong>D 108</strong></td>
</tr>
<tr>
<td><strong>B 35</strong></td>
</tr>
<tr>
<td><strong>A 12</strong></td>
</tr>
<tr>
<td><strong>E 89</strong></td>
</tr>
<tr>
<td><strong>A 11</strong></td>
</tr>
<tr>
<td><strong>A 13</strong></td>
</tr>
<tr>
<td><strong>B 34</strong></td>
</tr>
<tr>
<td><strong>C 55</strong></td>
</tr>
<tr>
<td><strong>B 44</strong></td>
</tr>
<tr>
<td><strong>B 30</strong></td>
</tr>
<tr>
<td><strong>C 58</strong></td>
</tr>
<tr>
<td><strong>G136</strong></td>
</tr>
<tr>
<td><strong>B 83</strong></td>
</tr>
<tr>
<td><strong>H415</strong></td>
</tr>
<tr>
<td><strong>B 39</strong></td>
</tr>
<tr>
<td><strong>B 65</strong></td>
</tr>
<tr>
<td><strong>B 33</strong></td>
</tr>
<tr>
<td><strong>A 4</strong></td>
</tr>
<tr>
<td><strong>D 50</strong></td>
</tr>
</tbody>
</table>
Poster Presentations (continued)

C 53 Christina Heintz with Shaohong Zhang and Jin Jin, CHEMISTRY – Microwave Assisted Transition Metal-Catalyzed Coupling Reaction
C 95 Breanne Helmers with Julie Herbstreith and Colin Harke, PSYCHOLOGY – Sexual Willingness of Young Adults with Same and Opposite Gender Individuals: Results from the Bar Scene
F 118 Taylor Herrick with Curtis Dunkel, PSYCHOLOGY – Effects of Sibling Identification on Academic Achievement, Sexual Behavior, and Substance Use
F 111 Elizabeth Hessman with Don Johnson, ACCOUNTING AND FINANCE – Correlation Between Real Estate Mutual Funds
F 114 Olivia Hickman, Matthew Morrison with Eugene Mathes, PSYCHOLOGY – Conflict Resolution in Intimate Relationships
G 134 Rachael Hjerpe with Mei Wen, HEALTH SCIENCES – Analysis of HPV in Men and Women & Associated Cancers
G 127 Kathleen Holte with Debra Allwardt, SOCIAL WORK – Perceptions of Stalking Among College Students: A Comparison between Rural, Suburban, and Urban Students
B 45 Stephanie Hoover with Nancy Schaefer, SOCIOLOGY – Why Do I Want to Look Like Her Again? Oh That’s Right! Society Told Me So... A Critique of Body Image in American Society
A 22 Allison Hoyle, Kasey Moore with Abha Singh, ELEMENTARY EDUCATION – Best Practice in Reading Comprehension
G 140 Pashence Jackson, Kodjo Tovor, Aaron Walsh with Fetene Gebrewold, HEALTH SCIENCES – The Occupational Health Effects of Working in a Nursing Home as a Patient Care Provider
C 57 Blake Pranger with Jongnam Choi, GEOGRAPHY – Analyzing the Factors Affecting the Size of Illinois Reservoirs
E 85 Stephanie Jacobs, Robert Dunn, Ashley Nelson, Monica Logan with Matthew Blankenship, PSYCHOLOGY – The Occupational Health Effects of Working in a Nursing Home as a Patient Care Provider
D 78 Michelle Kapugi with Brian Bellott, CHEMISTRY – Synthesis of Asymmetric Bidentate Phosphines
D 80 Ashley Kennedy with Brian Bellott, CHEMISTRY – Solid State Synthesis of Perovskite Analogs
F 120 Nicole Kieffer with Dana Lindemann, PSYCHOLOGY – Media Influences on Sexual Perception and Behavior
C 52 Erica Klecklar with Shaohong Zhang and Jin Jin, CHEMISTRY – Microwave Assisted Synthesis of Diaryl Selenides
Q 135 Christina Knappczyk, Shavonya Williams, and Omalara Soetan with Fetene Gebrewold, HEALTH SCIENCES – The Occupational Health Effects of Sleep Apnea
B 32 Brian Knecht with Thomas Hegna, GEOLOGY – First CT-Scan Reconstruction of Graecophonous, A Late Carboniferous Whip Spider (Arachnida: Amblypygi) from Coseley, Staffordshire, UK
H 99 Ira Koesler, Dan Bidle with Zhiqiang Yan, ACCOUNTING AND FINANCE – Importance of Health Insurance
F 103 Saule Kontautaite with Don Johnson, ACCOUNTING AND FINANCE – Analyzing Home Affordability between the Years of 1980 to 2010
A 10 Kristy Phillipson with Yong Tang, ENGLISH AND JOURNALISM – Media Liability Lawsuits and Mass Media Law
H 147 Katharine Parker with Winthrop Phippen, AGRICULTURE – Impact of Heat Stress on Field Pennycress Seed Yield and Polien Viability
G 128 Trevor Paulson with Christopher Kovacs, KINESIOLOGY – Effect of In-water Scuba Diving Activities on Response Time in Student Recreational Divers
F 104 Peter Pettitras with Don Johnson, ACCOUNTING AND FINANCE – The Use of Asset Allocation to Yield the Best Portfolio Mix
E 86 Ashley Nelson, Terry Jones, Justin Valdez with Abha Singh, ELEMENTARY EDUCATION – Technology Incorporated in Elementary Education Best Practice
E 25 Josephine O’Day with Everett Hamner, LIBERAL ARTS AND SCIENCES – Evolution is Not Immoral: Doctor Who, Natural Selection, and Social Darwinism
H 474 Blake Pranger with Jongnam Choi, GEOGRAPHY – Annual Pumpage from Illinois Reservoirs Dependent upon Weather Factors
Poster Presentations (continued)

G133 Natalya Pratt, Diamond Watkins, Jennifer Lee with Mei Wen, HEALTH SCIENCES – The Deduction for Health Cost

G 59 Alicia Pugh with Jong-Kuen Huang and Lisa Wen, CHEMISTRY – Amplification Of A Putative L-3 Hydroxacyl-CoA Dehydrogenase Gene From Genomic DNA Of Micrococcus Luteus WUJH20 By Polymerase Chain Reaction

F110 Jason Renacido with Don Johnson, ACCOUNTING AND FINANCE – The Impact of the Stock Market on Household Portfolios

D 69 Shanique Ries with Kenneth McCravy, BIOLOGY – Parasitism of Australian Cockroaches by Pinworms: Spatial Variation and Effects of Microclimate

C 60 Shelby Rogers with Brian Peer, BIOLOGY – Acceptance of Brown-headed Cowbird Parasitism: A Consequence of Avian Mafia Tactics?

A 21 Megan Salvatori, Brianna Eizenga with Abha Singh, ELEMENTARY EDUCATION – Best Practice in Science Teaching

A 15 Christina Sanders-Ring with Dan Malachuk, ENGLISH AND JOURNALISM – Tropic of Frankenstein: The Creature as Device in Cross-Cultural Rhetoric

A 24 Dana Sarallo with Frances Steward, ELEMENTARY EDUCATION – The Report of Teachers’ Perceptions and Influential Diversity Factors

B 28 Logan Sauers, Timothy Woodworth, Richard Hartweg with Pengqian Wang, PHYSICS – Light Interference in Anisotropic Materials

D 82 Jennifer Shackelford with Brian Bellott, CHEMISTRY – Development of an Organometallic Reaction for use in an Educational Lab

H146 Marina Small with Andrea Porras-Alfaro, BIOLOGY – Survey of Thermophilic Fungi in Western Illinois Grain Elevators

F107 Patrick Smith with Don Johnson, ACCOUNTING AND FINANCE – The Relationship between Unemployment Rates and NCREIF Index Returns

B 25 Mark Smith with Saisudha Mallur and P. K. Babu, PHYSICS – Fluorescence of Dysprosium ions in Zinc Borate glasses

A 16 Jennifer Smith, Caitlyn Wright with Lori Baker-Sperry, WOMEN’S STUDIES – Comparing Female and Male Athletics in the Realm of Sexuality

E100 Alex Stanley with Don Johnson, ACCOUNTING AND FINANCE – Correlation Between FTSE NAREIT Index and Three Major Equity Market REIT Indices

B 42 Joseph Struett with Marietta Loehrlein, AGRICULTURE – Effects of Foliar Application of Seaweed Extract on Marigolds (Tagetes)

G126 Jillian Taylor with Bree McEwan, COMMUNICATION – The Use of Social Exchange Theory when Proving or Disproving Relational Maintenance in Romantic Situations

D 68 Jamela Thompson with Sean Jenkins, BIOLOGY – Turtle Community Composition and Structure of Two Remnant Wetland Complexes on the Upper Mississippi River

B 38 Alonza Thornton, Aramis Cooner with Jo-Ann Morgan, AFRICAN AMERICAN STUDIES – Twenty First Century African American Women in the Arts

G137 Eric Tietz, Maria Martenson, Karolynn Vergil with Fetene Gebrewold, HEALTH SCIENCES – Occupational Risk of Bloodborne Pathogens

A 17 Taylor Turner with C. S’thembile West, WOMEN’S STUDIES – Gendered Space and Social Power in Advertisement

E 87 Justin Valdez with David Lane, PSYCHOLOGY – Exercise Addiction and the Underlying Motivations Involved with Specific Forms of Exercise

G143 Nornil Villaflores with Mei Wen, HEALTH SCIENCES – Comparing Effectiveness of Sodium Reduction Program from Health Policy Perspective

E 88 Kelsea Visalli, Brittany Hall, PSYCHOLOGY – Hunger, Environmental Security, and Mate Preferences

A 1 Di Ann Vulich with Everett Hamner, ENGLISH AND JOURNALISM – Survival Gardening for the Apocalypse

G131 Precious Williams, Kimberly Williams, Adjilat Soetan with Mei Wen, HEALTH SCIENCES – Violence against Women in the U.S.

D 72 Shelbie Wilson, Bethany Borchert, William Taylor, Bartlomiej Pienkowski with Laura Barden-Gabbei, BIOLOGY – Direct and Indirect Effects of Atrazine on Snails

A 19 Audra Wilson with Holly Stovall, WOMEN’S STUDIES – Women’s Role in Theatre

B 27 Timothy Woodworth with Kishor Kapale, PHYSICS – Error-Correcting Codes: Classical to Quantum

D 67 Jeff Woodyatt with Sean Jenkins, BIOLOGY – Ovistory and Seedling Composition of Prairie Glen in Relation to Landscape Position and Recent Prescribed Burning Regime

F109 Jared Yingling with Don Johnson, ACCOUNTING AND FINANCE – Why Have Farmland Prices in Illinois Increased so Drastically in the Last 40 Years?

G139 Elizabeth Zellers, Megan Scott, Colleen Maloney with Mei Wen and Fetene Gebrewold, HEALTH SCIENCES – The Occupational Health Effects of Hazardous Agents Leading to Skin Diseases


D 70 James Zuepi with Kenneth McCravy, BIOLOGY – Assessing Forest Bee Sampling Methodology at Kibbe Life Science Station
Podium Presentations

Fox Room, Heritage Rooms (Nauvoo/Galena and New Salem) and Sandburg Theatre

Zachary Andrew with Scott Holt, BIOLOGY
Growth Rates of Leuconostoc Bacteria on Defined Growth Media vs Complex Growth Media

Alice Baglin with Yong Tang, ENGLISH AND JOURNALISM
Ethical Regulations of Press in United Kingdom

Scott Baumbich with Shane Sanders and Justin Ehrlich, ECONOMICS AND DECISION SCIENCES
Asymptotic Learning in the Monty Hall Problem

Chris Bell with Barbara Ashwood-Gegas, ENGLISH AND JOURNALISM
Haunted

Gregory Boidy Jr. with Jonathan Day, POLITICAL SCIENCE
The Nature and Extent of Student Media Censorship in the United States

Andrew Brown with William Polley, ECONOMICS AND DECISION SCIENCES
Future Income: The Roles of Higher Education and the Effect Working while in College has on Academic Achievement

Jason Buss with Robert Porter, RECREATION, PARK AND TOURISM ADMINISTRATION
Long Lasting Effects of Youth Camps

Peter Byrne with Yong Tang, ENGLISH AND JOURNALISM
Shield Laws: The Protection of American Journalists

Denis Chapan with Kristine Kelly, PSYCHOLOGY
When God's on Your Side: Thwarting the Negative Effects of Rejection

Daniel Cromie with Yong Tang, ENGLISH AND JOURNALISM
Media and Journalism in Japan

Kyle Dexter with Barbara Ashwood-Gegas, ENGLISH AND JOURNALISM
Raising Hell: A Compendium to Black Metal

Elizabeth Etta and Brandon Scates with Erik Brooks, AFRICAN AMERICAN STUDIES
How Much Farther? : An Analysis of African American Leadership in the Present Day

Crisborne Givens with Samuel Edsall, BROADCASTING
Tales of Lost Souls: A Short Film Project

Morgan Gorsuch with Yong Tang, ENGLISH AND JOURNALISM
Libel in the Digital Age

Joe Gregorio with Yong Tang, ENGLISH AND JOURNALISM
Digital Music Sampling: Friend or Foe to the Recording Industry

Jed Hill with John Simmons, PHILOSOPHY AND RELIGIOUS STUDIES
Shekhinah and Tiferet Litany: Toward a Mystical Interpretation of Mormon Scripture

John Johnson with Greg Baldi, POLITICAL SCIENCE
The German Pirate Party: Post-Materialist Politics in the 21st Century

Breeea Little with Alphonso Simpson, AFRICAN AMERICAN STUDIES
A Primary Target: The Assassination of the Black Family in the U.S.

Julian Medlock with Yong Tang, ENGLISH AND JOURNALISM
Does 2025 Mark the End of Water for Egypt Due to This Water Crisis?

Charish Minard with Anthony McBride, LAW ENFORCEMENT AND JUSTICE ADMINISTRATION
Drugs and Juveniles the Facts

Jennifer Mitchell with Rebekah Buchanan, ENGLISH AND JOURNALISM
Digital Music Sampling: Friend or Foe to the Recording Industry

Alli Reed with Jill Myers, LAW ENFORCEMENT AND JUSTICE ADMINISTRATION
Citizen Journalism's Effect on Law Enforcement

Allie Schulte with Yong Tang, ENGLISH AND JOURNALISM
The Art of Writing Creative Non-Fiction Utilizing Research and other Literary Techniques

Joseph Pienta with Greg Hall, HISTORY
The Cherry Coal Mine Disaster of 1909: A Disastrous Event that Would Spark Change in Illinois

Steven Williams with Jo-Ann Morgan, AFRICAN AMERICAN STUDIES
The Life and Times of Jack “The Blackman” McCord and His Importance to the History of McDonough County

Performance Presentation

Prairie Lounge

Amy Broadbent with Tammie Walker
Chopin Étude in C minor, Op. 10, No. 12, “Revolutionary”

Andrea Owens with Randall Faust
Performing on Natural Horn and Modern Horn: How Music Was Written for Each Instrument and What Elements Both Instruments Bring To Performances

Hannah Porter with James Stegall
Uniquely American Music Education: Shape-Note Singing in the Southern Harmony

Joseph Valdes, Mila Gallardo, Luciana Hontila, Samantha Flores with Istvan Szabo
An Example of Beethoven’s Lasting Influence on Mozart’s Flute Quartet in c minor, Opus 18 Number 4, 1st Movement

Thank you to the College of Arts and Sciences, College of Business and Technology, College of Education and Human Services, College of Fine Arts and Communication, and the University Libraries for their support.

A special thank you to the podium and performance moderators and to the competition judges. The following individuals are recognized as judges for those presentations competing in the final round. Podium - Oswald Warner, Tom Blackford, Jennie Hemingway, Sarah Haynes, Audrey Watkins, Richard Musser, David Zanolla, and Jongho Lee. Poster – Andrew Baker, Holly Stovall, William Polley, Febe Pamonag, Fetene Gebrewold. Performance – Heidi Clemmens, Matt Thomas, and Bill Kincaid.

Undergraduate Research Day is named in honor of Thomas E. Helm, Professor Emeritus of Philosophy and Religious Studies and former Director of the Centennial Honors College. The endowment created to name this event, a reflection of the ongoing commitment to the work of Dr. Helm, is gratefully acknowledged. For more information, contact the WIU Foundation or visit www.wiu.edu/foundation.