Hutton Honors College
Indiana University-Bloomington

2014 Undergraduate Research Symposium & Fair

2nd Floor, School of Public and Environmental Affairs

Saturday, April 12th, 2014
9:00am – 5:00pm

Photo courtesy of Indiana University

HUTTON HONORS COLLEGE
INDIANA UNIVERSITY
811 E. Seventh Street  Bloomington, IN 47405-3937
(812) 855-3510
2014 Honors Research Symposium  
Saturday, April 12th  
(Held at the School of Public & Environmental Affairs:  
1315 E Tenth Street, Bloomington, IN 47405)

**Registration Table**  
9:00-3:00  
Attrium 2nd Floor

**Meet & Greet and Breakfast**  
9:00-9:30  
1st Floor Lounge Area

**Keynote Speaker: Dr. Fritz Breithaupt**  
9:30-10:00  
Room 167  
Introduced by C.J. Skok

**Morning Sessions:**

1. **Psychology, Neuroscience, Health I**  
   10:15-12:15  
   Room 272  
   Undergraduate Moderator: Roshni Dhoot  
   Graduate Moderator: Samantha Cohen  
   Presenters: Sangeeth Jeevan, Sarah Fischer, Daisy Day, Alexis Summers, Jordan Ellis, CJ Skok

2. **Non-profit Management I**  
   10:15-11:35  
   Room 274  
   Undergraduate Moderator: Duyen Nguyen  
   Graduate Moderator: Amy Schwarz  
   Presenters: Meghan Roesner, Kaylee Dolen, Maxine Laszlo, Laura Strawmyer

3. **Policy and Management**  
   10:15-12:45  
   Room 275  
   Undergraduate Moderator: Karter Harmon  
   Graduate Moderator: Alexander Lu  
   Presenters: Scott Zellner, William Mahoney, Garrett Lance, Jessica Kaplan, Brian Sutter, Jordan Yahiro, Amelia Marmolejo

4. **Sociology, Art and Narrative I**  
   10:15-11:55  
   Room 276  
   Undergraduate Moderator: Taylor Ballinger  
   Graduate Moderator: Tom VanHeuvelen  
   Presenters: Jack Whittle, Mariah McGhee, Ami Kirollos, Alison Hill, Ryan Myers

5. **Environmental Science**  
   10:15-12:45  
   Room 277  
   Undergraduate Moderator: Michael Peters  
   Graduate Moderator: Calvin Yahn  
   Presenters: Kara Fitzpatrick, Elizabeth Davis, Chloe Anderson, Lori Lovell, Mary E. Nicholas, Jennifer Swilik, Caitlyn Cooper
6. **Arts Management**  
   10:15-11:55  
   Room 278  
   Undergraduate Moderator: Samantha Harvey  
   Graduate Moderator: Alyssa Blades  
   Presenters: Samantha Sachs, Nicole Guba, Anne Sharpe, Keegan Vail, Joe Romweber

**Lunch: Presenters and Mentors**  
   11:30-1:30  
   Room 273 & Commons

**Poster Sessions**  
   12:30-1:30  
   2nd Floor Hallway  
   (set-up in room 270)

**Afternoon Sessions:**

7. **Financial Policy**  
   1:45-3:05  
   Room 272  
   Undergraduate Moderator: William Mahoney  
   Graduate Moderator: Aileen Richardson  
   Presenters: Keith Radzik, Erica Knear, Liam Grimley, Daniel Ripma

8. **Non-profit Management II**  
   1:45-3:05  
   Room 274  
   Undergraduate Moderator: Kaylee Dolen  
   Graduate Moderator: Ashley Meruani  
   Presenters: Julie Stratmann, Sarah Horn, Sydney Morton, Lillian Kinder

9. **International Issues**  
   1:45-3:35  
   Room 275  
   Undergraduate Moderator: CJ Skok  
   Graduate Moderator: Brady Harman  
   Presenters: Andrea Grabner, Grant Eyster/Thomas Sowinski, Michael Caldie, Jack Renner

10. **Sociology, Art and Narrative II**  
    1:45-3:35  
    Room 276  
    Undergraduate Moderator: Sarah Fischer  
    Graduate Moderator: Jane VanHeuvelen  
    Presenters: Asna Asrar/Helen Shymanski/Rae Wadell, Sarah Whaley, Deborah Backman

11. **Problems in Science**  
    1:45-3:05  
    Room 277  
    Undergraduate Moderator: Elizabeth Davis  
    Graduate Moderator: Christopher Haddock  
    Presenters: Samantha Young, Julia Peceny, Katelyn Jensen, Michael Peters

12. **Environmental Management**  
    1:45-3:05  
    Room 278  
    Undergraduate Moderator: Lori Lovell  
    Graduate Moderator: Brian Forist  
    Presenters: Kelsey Hinton, Erica Walker, Karter Harmon, Mark Sahm
Panel 1  Psychology, Neuroscience, Health I

10:15-12:15         Room 272

Undergraduate moderator: Roshni Dhoot
Graduate moderator: Samantha Cohen

Instruction Manipulation for Discrete Slot/shared Resources-Strategies in VWM
Presenter: Sangeeth Jeevan, Neuroscience, Senior
Faculty Mentor: Robert Nosofsky, Professor, Psychological and Brain Sciences

Prism Adaptation and Personality
Presenter: Sarah Fischer, Psychology, Senior
Faculty Mentor: William Hetrick, Professor, Psychological and Brain Sciences

Transactional Relationships and Moderators between Parenting and Child Self-regulation
Presenter: Daisy Day, Psychology, Senior
Faculty Mentor: John E Bates, Professor, Psychological and Brain Sciences

Depression and How it Affects Working at a Faith-Based Nonprofit Organization
Presenter: Alexis Summers, Arts Management, Senior
Faculty Mentor: Cheryl Hughes, Professor, SPEA

How Healthy Are Our Hospitals: An Analysis of Hospital Quality and Medicare Patient Volume
Presenter: Jordan Ellis, Health Administration, Senior
Faculty Mentors: Mark Norrell, Professor, SPEA
Kosali Simon, Professor, SPEA

The Alcohol Binging Threshold Hypothesis: Onset of Associations between Binging and Cognitive Deficits
Presenter: CJ Skok, Neuroscience/Psychology, Junior
Faculty Mentor: Peter Finn, Professor, Psychological and Brain Sciences
Panel 2
Non-profit Management I
10:15-11:35 Room 274

Undergraduate moderator: Duyen Nguyen
Graduate moderator: Amy Schwarz

To Spend or Not to Spend: Addressing Overhead Spending in the Nonprofit Sector
Presenter: Meghan Roesner, Arts Management, Senior
Faculty Mentor: Cheryl Hughes, Professor, SPEA

Climate Change and Capacity: Comparing the Policy Influences of US and German Nonprofit Organizations on Climate Change Legislation
Presenter: Kaylee Dolen, Nonprofit Management, Senior
Faculty Mentor: Chris Doran, Adjunct Professor, SPEA

Make-A-Wish and Strategic Alliances: A Case for Cause-Related Marketing
Presenter: Maxine Laszlo, Nonprofit Management, Junior
Faculty Mentor: Alvin Lyons, Lecturer, SPEA

Social Media in the Social Sector: Under what conditions is social media effective for small nonprofits?
Presenter: Laura Strawmyer, Nonprofit Management, Junior
Faculty Mentor: Jennifer Brass, Assistant Professor, SPEA
Panel 3  
**Policy and Management**

**10:15-12:45**

**Room 275**

Undergraduate moderator: Karter Harmon  
Graduate moderator: Alexander Lu

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**Drawing Lines in the Sand: Nonpartisan Redistricting Commissions in the United States**

**Presenter:** Scott Zellner, Policy Analysis, Junior  
**Faculty Mentor:** Frank Nierzwicki, Lecturer, SPEA

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**Before the Beaches: The Logistics of Operation Overlord and D-Day**

**Presenter:** William Mahoney, Public Affairs, Junior  
**Faculty Mentor:** Gene Coyle, Professor, SPEA

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**The Battle for Benefits: Exploring Human Capital Factors that Affect the VA Claims Backlog**

**Presenter:** Garrett Lance, Policy Analysis, Senior  
**Faculty Mentor:** William Resh, Assistant Professor, SPEA

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**Improving Teacher Quality Through Merit-Based Evaluation: An Analysis of Indiana’s New Teacher Appraisal System and its Ability to Promote Meaningful Learning in Schools**

**Presenter:** Jessica Kaplan, Legal Studies, Senior  
**Faculty Mentor:** Stephen Harper, Adjunct Professor, SPEA

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**Change Management: A Review of Literature & Practical Application at the Monon Community Center**

**Presenter:** Brian Sutter, Management, Senior  
**Faculty Mentor:** William Resh, Assistant Professor, SPEA

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**Projections the Effect of the Excise Tax on High Cost Employer-Sponsored Health Coverage on Health Care Consumption**

**Presenter:** Jordan Yahiro, Policy Analysis, Junior  
**Faculty Mentor:** Bradley Heim, Associate Professor, SPEA

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**Counterterrorism in a Post 9/11 World**

**Presenter:** Amelia Marmolejo, Legal Studies, Senior  
**Faculty Mentor:** Gene Coyle, Professor, SPEA
Panel 4  Sociology, Art and Narrative I

10:15-11:55  Room 276

Undergraduate moderator: Taylor Ballinger
Graduate moderator: Tom VanHeuvelen

Character and Death: A Content Analysis of Popular Horror Cinema
Presenter: Jack Whittle, Sociology, Senior
Faculty Mentor: Brian Powell, Professor, Sociology

An Examination of the Role of an Offender’s Race During Conviction and Sentencing Stages of the Criminal Justice Process
Presenter: Mariah McGee, Sociology/Criminal Justice, Senior
Faculty Mentor: Brian Powell, Professor, Sociology

Arts for the Win: Long-Term Effects of Youth Arts Participation
Presenter: Ami Kirollos, Sociology, Senior
Faculty Mentor: Brian Powell, Professor, Sociology

Multiracial Identity: The Influence of Family Members on Racial Self-Identification
Presenter: Alison Hill, Sociology/Criminal Justice, Senior
Faculty Mentor: Brian Powell, Professor, Sociology

Sacrificial Surrender: Offering a Narrative Alternative to Violence
Presenter: Ryan Myers, Speechwriting/Communication & Culture, Junior
Faculty Mentor: Robert Ivie, Professor Emeritus, Communication and Culture
Panel 5  
Environmental Science  
10:15-12:45  
Room 277

Undergraduate moderator: Michael Peters  
Graduate moderator: Calvin Yahn

Prioritization of Shoreline Parcels on Lac Courte Oreilles, WI, According to Riparian Habitat
  Presenter: Kara Fitzpatrick, Environmental Science, Senior  
  Faculty Mentor: Melissa Clark, Senior Lecturer, SPEA

Relocating Earthquakes on the Oregon Continental Margin
  Presenter: Elizabeth Davis, Environmental Science/Math, Senior  
  Faculty Mentors: Anne Trehu, Professor, Geology and Geophysics  
                   Michael Hamburger, Professor, Geological Sciences  
                   Gary Pavlis, Professor, Geological Sciences

Determining Proximate Causes and Underlying Driving Forces of Mangrove Deforestation near Three Coastal Protected Areas in Ecuador
  Presenter: Chloe Anderson, Environmental Science, Senior  
  Faculty Mentor: Rinku Roy Chowdhury, Assistant Professor, Geography

Geochemical Indicators of Microbial Health in a Passive AMD Bioreactor
  Presenter: Lori Lovell, Environmental Science, Senior  
  Faculty Mentor: Tracy Branam, Research Geochemist, Indiana Geological Survey

Geochemical Processes involved in a Constructed Wetland Receiving Outflow from a Sulfate-Reducing Bioreactor Used to Treat Acid Mine Drainage
  Presenter: Mary E. Nicholas, Environmental Science, Senior  
  Faculty Mentor: Greg Olyphant, Associate Professor, Geological Sciences

The Impacts of Drought on Nitrogen Cycling in Forest Soils
  Presenter: Jennifer Swilik, Environmental Science/Economics, Senior  
  Faculty Mentor: Eddie Brzostek, Research Associate, Biology

Crayfish Burrows as an Indicator of Wetland Integrity in Southern Indiana
  Presenter: Caitlyn Cooper, Environmental Science, Senior  
  Faculty Mentor: Thomas Simon, Visiting Clinical Professor, SPEA
Panel 6  

Arts Management

10:15-11:55  
Room 278

Undergraduate moderator: Samantha Harvey
Graduate moderator: Alyssa Blades

**Thou Shall Not Create: Copyright Gone Wrong**
- **Presenter:** Samantha Sachs, Arts Management, Senior
- **Faculty Mentor:** Monika Herzig, Senior Lecturer, SPEA

**A Call for Fair Play: Pandora Royalty Wars**
- **Presenter:** Nicole Guba, Arts Management, Senior
- **Faculty Mentor:** Monika Herzig, Senior Lecturer, SPEA

**The Arts and Community Engagement: The Institutional Benefits of Reconnection with the Public**
- **Presenter:** Anne Sharpe, Arts Management, Senior
- **Faculty Mentor:** Joanna Woronkowicz, Assistant Professor, SPEA

**Beneficial Arts Collaboration: A Bloomington Focus**
- **Presenter:** Keegan Vail, Public and Nonprofit Management, Senior
- **Faculty Mentor:** Beth Gazley, Associate Professor, SPEA

**“Blurred Lines” – The sustainability and significance of independent record labels**
- **Presenter:** Joseph Romweber, Arts Management, Senior
- **Faculty Mentor:** Monika Herzig, Senior Lecturer, SPEA
Poster Sessions

12:30-1:30  2nd Floor Hallway & Atrium

*Will adolescent exposure to THC activate microglia in mice?*
  Exhibitor: Alexis Alcaraz, Neuroscience, Senior  
  Faculty Mentor: Ken Mackie, Professor, Psychological and Brain Sciences

*Religious Differences in Attitudes Towards Mental Illness and Treatment-Seeking*
  Exhibitor: Deborah Backman, Sociology/Music, Senior  
  Faculty Mentor: Brian Powell, Professor, Sociology

*Procedural Justice and Lawyering: Understanding Lay Perceptions of Procedural Fairness*
  Exhibitor: Taylor Ballinger, English/Psychology, Sophomore  
  Faculty Mentor: Victor Quintanilla, Associate Professor, Law

*Structure Groups of Algebraic Curvature Tensors in Dimension Three*
  Exhibitor: Lea Beneish, Math/Psychology, Junior  
  Faculty Mentor: Matthias Weber, Professor, Mathematics

*Reproductive Success of Steinernema Nematodes due to Bacteriocin-production Status of Xenorhabdus Symbiont*
  Exhibitor: Sofia Bertoloni Meli, Biology, Sophomore  
  Faculty Mentor: Farrah Bashey, Assistant Scientist, Biology

*Sustainable Safety*
  Exhibitor: Emily Bowman, Recreational Therapy, Freshman  
  Faculty Mentor: Rasul Mowatt, Associate Professor, Public Health

*Females in the Male-Dominated Martial Art of Brazilian Jiu-Jitsu*
  Exhibitor: Stephanie Bureau, Psychology, Junior  
  Faculty Mentor: Donna Eder, Professor, Sociology

*Maternal Cues Modulating Mouse Pup Nipple Attachment*
  Exhibitor: Nandita Chittajallu, Biology, Junior  
  Faculty Mentors: Jeffrey Alberts, Professor, Psychological and Brain Sciences  
  Sachiko Koyama, Associate Scientist, Psychological and Brain Sciences  
  Graduate Mentor: Cathleen Rodda, Graduate Student, Psychological and Brain Sciences

*Relocating Earthquakes on the Oregon Continental Margin*
  Exhibitor: Elizabeth Davis, Environmental Science, Senior  
  Faculty Mentors: Anne Trehu, Professor, Geology and Geophysics  
    Michael Hamburger, Professor, Geological Sciences  
    Gary Pavlis, Professor, Geological Sciences
Transactional Relationships and Moderators between Parenting and Child Self-regulation
Exhibitor: Daisy Day, Psychology, Junior
Faculty Mentor: John Bates, Professor, Psychological and Brain Sciences

Band Restriction Effects on Weight Loss & Lifestyle of LAGB Patients
Exhibitors: Roshni Dhoot, Nutrition Science, Sophomore
Kuangda Shan, Nutrition Science, Sophomore
Faculty Mentor: Shahla Ray, Senior Lecturer, Health Sciences

A Comparison of Lifestyle Behaviors and Weight-Related Attitudes between High School and College Students and Their Effects on Weight Change
Exhibitor: Roshni Dhoot, Nutrition Science, Sophomore
Faculty Mentor: Shahla Ray, Senior Lecturer, Health Sciences

Climate Change and Capacity: Comparing the Influences of US and German Nonprofit Organizations on Climate Change Legislation
Exhibitor: Kaylee Dolen, Nonprofit Management, Senior
Faculty Mentor: Chris Doran, Adjunct Professor, SPEA

Prism Adaptation and Personality
Exhibitor: Sarah Fischer, Psychology, Senior
Faculty Mentor: William Hetrick, Professor, Psychological and Brain Sciences

Seasonal Variations in Elemental Composition of Copiapite Mineral Crusts
Exhibitor: Rachel Gidley, Environmental Science, Senior
Faculty Mentor: Erika Elswick, Assistant Scientist, Geological Sciences

A Call For Fair Play: Pandora Royalty Wars
Exhibitor: Nicole Guba, Arts Administration, Senior
Faculty Mentor: Monika Herzig, Senior Lecturer, SPEA

Synthesis of Au/Pd octopods by seed-mediated co-reduction: The influence of seed size and metal concentration
Exhibitor: Samantha Harvey, Chemistry, Sophomore
Faculty Mentor: Sara Skrabalak, Assistant Professor, Chemistry

Radial Velocities of Three Relatively Unstudied Open Clusters
Exhibitor: Christian Hayes, Astronomy/Astrophysics/Physics, Junior
Faculty Mentor: Eileen Friel, Professor, Astronomy

Gas and Stars in the Edge-on Galaxy NGC 24
Exhibitor: Grace Haza, Physics, Freshman
Faculty Mentor: Liese van Zee, Professor, Astronomy
Multiracial Identity: The Influence of Family Members on Racial Self-Identification  
Exhibitor: Alison Hill, Sociology/Criminal Justice, Senior  
Faculty Mentor: Brian Powell, Professor, Sociology  
Graduate Mentors: Shawna Rohrman, Graduate Student, Sociology  
Emma Cohen, Graduate Student, Sociology

Instruction Manipulation for Discrete Slot/shared Resources-Strategies in VWM  
Exhibitor: Sangeeth Jeevan, Neuroscience, Senior  
Faculty Mentor: Robert Nosofsky, Professor, Psychological and Brain Sciences

Involvement of FtsE ATPase and FtsX Extracellular Loops 1 and 2 in FtsEX:PcsB Complex Function in Cell Division of Streptococcus pneumoniae D39 and Localization of FtsE, FtsX, and PcsB within the Cell  
Exhibitor: Katelyn Jensen, Biology, Senior  
Faculty Mentor: Malcolm Winkler, Professor, Biology

Expression of CHR2 through DGLα and DGLβ Promoter Constructs  
Exhibitor: Song Kim, Neuroscience, Sophomore  
Faculty Mentor: Ken Mackie, Professor, Psychological and Brian Sciences  
Project Mentor: Jim Wagner-Miller, Research Scientist, Psychological and Brain Sciences

Neurobiological Processes Associated with Gratitude  
Exhibitor: Prathik Kini, Mathematics/Economics, Junior  
Faculty Mentor: Joshua Brown, Associate Professor, Psychological and Brain Sciences

Arts for the Win: Long Term Effects of Youth Arts Participation  
Exhibitor: Ami Kirollos, Sociology, Senior  
Faculty Mentor: Brian Powell, Professor, Sociology

The Requirement for Pneumococcal SppS Is Relieved by Inactivation of the Gene pbp1a  
Exhibitor: Ariel Magallon, Biology/Spanish, Junior  
Faculty Mentor: Malcolm Winkler, Professor, Biology

Toddler’s Gift Delay Task Performance and Its Relationship with Mother-rated Effortful Control  
Exhibitor: Wendy Li, Psychology, Junior  
Faculty Mentor: John Bates, Professor, Psychological and Brian Sciences

Classifying variation: Foreign-accent detection in the presence of numerous linguistic varieties  
Exhibitor: Kelsey Marks, Speech and Hearing, Senior  
Faculty Mentor: Tessa Bent, Assistant Professor, Speech and Hearing Sciences

An Examination of an Offender’s Race During Conviction and Sentencing Stages of the Criminal Justice Process  
Exhibitor: Mariah McGee, Sociology, Senior  
Faculty Mentor: Brian Powell, Professor, Sociology

Determining the Effects of MCAK Targeting and Function on Spindle Assembly  
Exhibitor: Christina Moe, Biology, Freshman  
Faculty Mentor: Claire Walczak, Professor, Biochemistry and Molecular Biology
Effects of Bacteriocin Production on Competition between Two Xenorhabdus Species
Exhibitor: Leah Palmer, Microbiology, Senior
Faculty Mentor: Farrah Bashey-Visser, Assistant Scientist, Biology

Testing the TY1 Epitope Tag for Chromatin Immunoprecipitation of Human Transcription Factors ETS 1 and SPDEF
Exhibitor: Jay Parekh, Biochemistry, Freshman
Faculty Mentor: Peter Hollenhorst, Assistant Professor, Biochemistry and Molecular Biology

Suppressor mutations of Δpbp2b essentiality phenotype in Streptococcus pneumoniae
Exhibitor: Julia Peceny, Biology, Senior
Faculty Mentor: Malcolm Winkler, Professor, Biology

Thou Shall Not Create: Copyright Gone Wrong
Exhibitor: Samantha Sachs, Arts Management, Senior
Faculty Mentor: Monika Herzig, Senior Lecturer, SPEA

Utilization of a Baculovirus to Express Human Chaperonin mtHsp60
Exhibitor: Jared Salisbury, Biochemistry, Junior
Faculty Mentor: Lingling Chen, Associate Professor, Molecular and Cellular Biochemistry

Modeling Average Versus Individual Human Middle Ear Data
Exhibitor: Lucia Schnetzer, Physics, Sophomore
Faculty Mentor: Robert Withnell, Professor, Speech and Hearing Sciences

LAGB-Induced Nutritional Status Modulation in Human and its Effect on Gut Microbiota Compositions
Exhibitors: Kuangda Shan, Nutrition Science, Sophomore
            Roshni Dhoot, Nutrition Science, Sophomore
Faculty Mentor: Shahla Ray, Senior Lecturer, Health Sciences

Visualizing the Life of a Plant: Exploring the Role Technology has in Promoting DIY Gardening in Urban Space
Exhibitor: Stephanie Weatherall, Informatics, Senior
Faculty Mentor: Eli Blevis, Associate Professor, Informatics
Graduate Mentor: Yue Pan, Researcher, Human-Computer Interaction/Design

What Stories Stick? Serial Reproduction of Events
Exhibitor: Sarah Whaley, Cognitive Science, Sophomore
Faculty Mentor: Fritz Breithaupt, Professor, Germanic Studies
Collaborator: Ellie Brower, Freshman, Cognitive Science

Equity at Bloomington Skate Park
Exhibitor: Adam Wheeler, Recreational Therapy, Sophomore
Faculty Mentor: Rasul Mowatt, Associate Professor, Recreation, Park, and Tourism Stuides

Character and Death: A Content Analysis of Popular Horror Cinema
Exhibitor: Jack Whittle, Sociology, Senior
Faculty Mentor: Brian Powell, Professor, Sociology
**Intergenerational Epigenetic Inheritance in Tribolium Castaneum Reared on Differing Amounts of Flour**

Exhibitor: David Wong, Biology, Junior  
Faculty Mentor: Michael Wade, Professor, Biology

**Targeted Deletions to Determine the Role of Centrosomin during Drosophila Development**

Exhibitor: Samantha Young, Biology, Sophomore  
Faculty Mentor: Thomas Kaufman, Professor, Biology  
Research Mentor: Robert Eisman, Research Associate, Biology

**Discrepancies Between Implicit and Explicit Self-Esteem And Well-Being: The Role of Negativity Biases**

Exhibitor: Nelson Zounlome, Psychology/Sociology, Junior  
Faculty Mentor: Robert Rydell, Assistant Professor, Psychological and Brain Sciences
Panel 7  
Financial Policy

1:45-3:05          Room 272
Undergraduate moderator: William Mahoney
Graduate moderator: Aileen Richardson

Explaining Stock Market Linkages around the World
Presenter: Keith Radzik, Finance/Accounting, Freshman
Faculty Mentor: Utpal Bhattacharya, Associate Professor, Finance

Pre-Dispute Consumer Arbitration Clauses: Good Public Policy?
Presenter: Erica Knear, Legal Studies, Senior
Faculty Mentor: Nan Stager, Senior Lecturer, SPEA

Mechanisms of Control: The Political Roles of the IRS
Presenter: Liam Grimley, Public Financial Management/Legal Studies, Senior
Faculty Mentor: John Karaagac, Lecturer, SPEA

Terrorism Financing through Remittance
Presenter: Daniel Ripma, Policy Analysis/Public Financial Management, Junior
Faculty Mentor: Sameeksha Desai, Assistant Professor, SPEA
Smart Collaborations: Creating Meaningful Corporate-Nonprofit Partnerships in Bloomington, Indiana
Presenter: Julie Stratmann, Nonprofit Management, Senior
Faculty Mentor: Leslie Lenkowsky, Professor, SPEA

Sticking Around: Bloomington Host Agencies and Their Retention of Service Learners
Presenter: Sarah Horn, Nonprofit Management, Junior
Faculty Mentor: Al Lyons, Professor, SPEA

The Stigmatization of Poverty in America
Presenter: Sydney Morton, Public and Nonprofit Management, Junior
Faculty Mentor: David Reingold, Professor, SPEA
Graduate Mentor: Gabriel Pina, Doctoral Student, SPEA

Fair Trade Apparel: Purchase Intent among Young Female Adults
Presenter: Lillian Kinder, Nonprofit Management, Senior
Faculty Mentors: Shahzeen Attari, Assistant Professor, SPEA, Sharron Lennon, Professor, Apparel Merchandising and Interior Design
Panel 9  

International Issues

**1:45-3:35**  
Room 275

Undergraduate moderator: CJ Skok  
Graduate moderator: Brady Harman

**The Role of NGOs in political activism in Latin America**  
Presenter: Andrea Grabner, Environmental Management, Junior  
Faculty Mentor: Anh Tran, Assistant Professor, SPEA

**Regional Integration in the East African Community: Economic Development and Environmental Concerns**  
Presenters: Grant Esyter, Policy Analysis, Senior  
            Thomas Sowinski, Environmental Management, Senior  
Faculty Mentor: Frank Nierzwicki, Visiting Lecturer, SPEA

**Chile: From Economic Growth to Clean Energy**  
Presenter: Michael Caldie, Environmental Management, Junior  
Faculty Mentor: David Audretsch, Professor, SPEA

**The Responsibility to Protect: A Comparative Analysis of UN Security Council Actions in Libya and Syria**  
Presenter: Jack Renner, Policy Analysis, Junior  
Faculty Mentor: Osita Afoaku, Clinical Professor, SPEA
Panel 10  Sociology, Art and Narrative II

1:45-3:35  Room 276
Undergraduate moderator: Sarah Fischer
Graduate moderator: Jane VanHeuvelen

Empathy & Networks: Ideal, Real, Pragmatic
Presenters: Asna Asrar, Neuroscience/Mathematics, Junior
            Helen Shymanski, French/History, Freshman
            Rae Wadell, Apparel Merchandising, Sophomore
Faculty Mentor: Fritz Lieber, Adjunct Professor, Hutton Honors College

What Stories Stick? Serial Reproduction of Events
Presenter: Sarah Whaley, Journalism/Cognitive Science, Sophomore
Faculty Mentor: Fritz Breithaupt, Professor, Germanic Studies
Collaborator: Ellie Brower, Freshman, Cognitive Science

Religious Differences in Attitudes Towards Mental Illness and Treatment-Seeking
Presenter: Deborah Backman, Sociology/Music, Senior
Faculty Mentor: Brian Powell, Professor, Sociology
Panel 11  Problems in Science

1:45-3:05  Room 277

Undergraduate moderator: Elizabeth Davis
Graduate moderator: Christopher Haddock

Targeted Deletions to Determine the Role of Centrosomin during Drosophila Development
Presenter: Samantha Young, Biology, Sophomore
Faculty Mentor: Thomas Kaufman, Professor, Biology
Research Mentor: Robert Eisman, Research Associate, Biology

Suppressor mutations of Δpbp2b essentiality phenotype in Streptococcus pneumoniae
Presenter: Julia Peceny, Biology, Senior
Faculty Mentor: Malcolm Winkler, Professor, Biology

Involvement of FtsE ATPase and FtsX Extracellular Loops 1 and 2 in FtsEX:PcsB Complex Function in Cell Division of Streptococcus pneumoniae D39 and Localization of FtsE, FtsX, and PcsB within the Cell
Presenter: Katelyn Jensen, Biology, Senior
Faculty Mentor: Malcolm Winkler, Professor, Biology

Steps toward Detection of a Long-Range Fermion-Fermion Spin-Dependent Interaction
Presenter: Michael Peters, Physics/Math/Astronomy, Freshman
Faculty Mentor: W. Michael Snow, Professor, Nuclear Physics
Panel 12  

Environmental Management

1:45-3:05  
Room 278

Undergraduate moderator: Lori Lovell  
Graduate moderator: Brian Forist

Potable Reuse of Las Vegas’s Water Supply
  
  Presenter: Kelsey Hinton, Environmental Management, Junior  
  Faculty Mentor: Andrea Need, Lecturer, SPEA

Multifunctional Green-Infrastructure & The Future of Motor City
  
  Presenter: Erica Walker, Environmental Management, Senior  
  Faculty Mentor: Orville Powell, Clinical Associate Professor, SPEA

Empowering the Ocean: Resilience Thinking as a Policy Tool for the Management of Marine Protected Areas
  
  Presenter: Karter Harmon, Environmental Management, Senior  
  Faculty Mentor: Vicky Meretsky, Associate Professor, SPEA

The Affects of Size, Distance and History of the Urban Forest
  
  Presenter: Mark Sahm, Environmental Science, Senior  
  Faculty Mentor: Burnell Fischer, Clinical Professor, SPEA  
  Graduate Mentor: Jessica Vogt, Associate Instructor, SPEA
Acknowledgements

Keynote Speaker

Fritz Breithaupt is Professor and Chair of the Department of Germanic Studies at Indiana University and is Adjunct Professor in Comparative Literature and Affiliate Professor in Cognitive Science. He studied in Hamburg, Berlin, and Baltimore and received his PhD in 1997 at Johns Hopkins University. He has published four books—on Goethe, the history of money, empathy, and the narrative mind—edited multiple volumes, and penned more than forty scholarly articles. He writes frequently for the press in Germany, especially Die Zeit and Zeit Campus. In fall 2013, he served as Interim Dean of Hutton Honors College.

Steering Committee

Bryce Campbell is the Scholarship Coordinator for the Hutton Honors College. She has been a member of the Hutton Honors College team for three years having previously worked with the IU Office of Student Financial Assistance.

Lynn Cochran is the Assistant Dean of the Hutton Honors College. She has a Master’s degree in Creative Writing and a PhD in English Literature from Indiana University.

Roshni Dhoot is a Nutrition Science major in the School of Public Health. After graduation, she hopes to attend medical school and become an obstetrician/gynecologist. Her extracurricular activities include serving as Public Relations Chair for the Indian Student Association and volunteering as an On-Scene Advocate and Crisis Line Worker at Middle Way House. She is also a member of IU Global Medical Brigades and enjoys the television shows Shark Tank and The Big Bang Theory. *(Roshni is also serving as a moderator.)*

*A special thanks to Laura Felicetti for coordinating the two workshops for the symposium presenters.*

Laura Felicetti is the Director of Admissions, Outreach, and Recruitment for the Hutton Honors College. She has a Master’s degree in Natural Resource Sciences and a PhD in Zoology from Washington State University.

Sarah Fischer is a fourth-year student in the Psychology department. She is involved in two research laboratories; one focuses on psychopathology and neuropsychometry, while the other is primarily concerned with implementation science. Sarah plans on attending a graduate clinical psychology program in the future. Sarah is currently working as an undergraduate teaching assistant and is involved in a number of extracurricular and co-curricular activities. *(Sarah is also serving as a moderator.)*

Stephanie Lewis is a seasoned Academic Advisor with the School of Public and Environmental Affairs. She coordinates the SPEA Honors Program and Advises SPEA Honors students.
Michael Peters is a freshman undergraduate physics, math, and astronomy major. He is from Munster, Indiana, and does research under Dr. W. Michael Snow in the Physics Department. After physics graduate school, he hopes to do research for a living, preferably in nuclear or particle physics. Michael's other interests include music and fencing. (Michael is also serving as a moderator)

CJ Skok is a junior majoring in Neuroscience and Psychology with minors in German and Chemistry. Hailing from Valparaiso, IN, C.J. is a research assistant in Dr. Peter Finn's Behavior-Affect Decision Making Lab. His primary research interests include externalizing pathology and its influence on decision making and the progressive effects of substance abuse on cognition. Upon graduation in May of 2015, C.J. hopes to attend medical school to either become a primary-care physician or a neurologist. In the spare few moments of breathing time he has, C.J. competes in endurance running events (including his 4th marathon this fall in Chicago) and also enjoys pastry baking. (CJ is also serving as a moderator)

Moderators

Taylor Ballinger is a sophomore double-majoring in Psychology and English with a minor in Political Science. His primary research interests are centered at the fascinating intersection of law and social psychology, and include understanding perceptions of procedural fairness and theories of implicit racism under the tutelage of Professor Victor Quintanilla at the Indiana University Maurer School of Law. He intends to pursue a senior thesis examining the role of empathy and race in understanding the amount of process afforded to lay disputants. He plans to attend law school after his undergraduate tenure, and potentially pursue a joint Ph.D. in Social Psychology.

Alyssa Blades is currently in her second semester as an arts administration masters candidate. She expects to graduate in December, 2014. Her background includes working at several arts and non-profit organizations such as The Kennedy Center, Opera Memphis, and the Delta Health Alliance. At the moment she is the Development Graduate Assistant for Cardinal Stage Company. This summer, she is very excited to intern at Bravo! Vail in Vail, Colorado. She holds a bachelor's degree in history from Rhodes College in Memphis, TN

Samantha Cohen is a graduate student in Psychological and Brain Sciences and a member of the Adaptive Behavior and Cognition lab. She is currently advised by Dr. Peter Todd. Her current research examines the evolution of the brain and behavior, emphasizing search patterns for romantic and social partners.

Elizabeth Davis will be graduating this season with undergraduate degrees in Environmental Science and Math. Her research interests are diverse but generally include the collection of environmental data in hard-to-reach places, including underwater and on other planets. Her recent projects have included evaluating the coastal water quality of a small Caribbean island and analyzing data from earthquakes off the coast of Oregon. She is currently looking for internship opportunities for the upcoming year in order
to further explore her research interests. In the future she hopes to visit Antarctica and the bottom of the ocean.

Kaylee Dolen is from Westfield, Indiana, and is graduating this May with a Masters of Science in Public Affairs, concentrated in Nonprofit Management. Kaylee will be attending the University of Denver for graduate school, where she plans to study International Human Rights. Kaylee’s areas of research interest include the European Union, Vietnam, social movements, the political economy, and nonprofit organization network relationships.

Brian Forist is a Ph.D. student in the Department of Recreation, Park, and Tourism Studies, minoring in Folklore. He holds a B.S. in Interdisciplinary Environmental Studies/Outdoor Education and Environmental Interpretation from Huxley College of the Environment and a M.S. in Interdisciplinary Environmental Studies and Elementary Education from Antioch University New England. His expertise is in natural and cultural history interpretation with many years of experience in national parks and other interpretive and environmental education settings. He is currently working on a new pedagogy of visitor-centered interpretation through dialogue.

Christopher Haddock is a second year graduate student in experimental nuclear physics at IU. Originally from Hermosa Beach, CA he graduated with a Bachelor of Science in Physics from UCLA in 2012. Chris is currently involved in experimental research efforts to constrain the quark-quark weak interaction between nuclei and also search for possible exotic (fifth force) interactions in nature using methods from neutron optics.

Brady Harman is a dual JD/MPA student in the Maurer School of Law and SPEA. His studies concentrate on international development and constitutional design. As the Managing JD Affiliate of the Center for Constitutional Democracy, Brady has extensive research and policy experience with the Burmese constitutional reform process and has visited Thailand to advise Burmese armed resistance movements. Additionally, Brady will serve as the Executive Productions Editor of the Indiana Journal of Global Legal Studies next year, and he will also enter his second term as President of the Graduate and Professional Student Organization (GPSO).

Karter Harmon is a third-year student from Franklin, IN majoring in Environmental Management with a certificate in Underwater Resource Management and a minor in Norwegian. Next year, he will begin studying Environmental Policy and Natural Resource Management as part of SPEA’s Accelerated Masters of Public Affairs program. Karter’s educational and career interests have become focused on the management and preservation of marine environments. After graduate school, he hopes to work as a manager of marine protected areas. This summer he will be researching at the Woods Hole Oceanographic Institution as a Student Fellow. He has also done field work with the IU Office of Underwater Science in the Dominican Republic. Outside of school Karter’s hobbies include writing and producing music, scuba diving, boating, fishing, hiking, and writing.”
Samantha Harvey is currently a sophomore undergraduate pursuing a bachelor of science in chemistry with a minor in physics and mathematics. She is from Granger, Indiana and has been doing nanoparticle research in a materials lab on campus. After graduation Samantha plans to enroll in a Ph.D. program and continue partaking in research, eventually making it a career. In her free time she also enjoys playing clarinet and piano.

Lori Lovell is a student from Florence, KY pursuing a B.S. in Environmental Science with a minor in Mathematics. During her undergraduate career, Lori has completed two NSF Research Experience for Undergraduates fellowships and has regularly explored multidisciplinary approaches to environmental research. Currently, she is assessing the seasonal activity of Sulfate-Reducing Bacteria in an Acid Mine Drainage Bioreactor through geochemical analyses as an IGS Center for Geospatial Data Analysis Intern. In the fall, Lori will begin graduate studies through SPEA's Accelerated Masters Program in Environmental Science at IU-Bloomington.

Alexander Lu a doctoral candidate in the Department of Sociology at Indiana University. Alex earned a B.A. and M.A. in sociology from Centenary College of Louisiana and Louisiana State University, respectively. His areas of interest are social psychology, race/ethnicity, emotions, and health/illness. Alex’s dissertation addresses how personal trauma such as murder transforms into a community trauma. This process, he argues, is a function of how advocates define victimhood using emotions. Alex analyzes the necessary and sufficient conditions under which institutionalizing a victim constitutes a community trauma.

William Mahoney is a junior from Columbus Indiana studying Public Affairs within the School of Public and Environmental Affairs. He was recently accepted into the Accelerated Master’s Program at SPEA and will begin his graduate studies next fall with a concentration in Public Management. After graduation, he hopes to join the United States Armed Forces following his studies to put his degree to work as a Public Affairs Officer.

Ashley Meruani is a SPEA student from Fort Wayne, Indiana. She received her Bachelor's degree in public and nonprofit management from SPEA and a Spanish minor. Ashley will graduate once again in May with a Master's in Public Affairs degree concentrating in nonprofit management.

Duyen Nguyen is a sophomore from Fishers, IN, where she attended Fishers High School. She is a Hutton Honors student currently studying Biochemistry and Neuroscience with a certificate in the Liberal Arts and Management Program, and hopes to one day attend medical school. Besides academics, she enjoys dedicating her spare time to extracurriculars, such as Indiana University Dance Marathon where she serves on the executive council as the Director of Special Events, Hoosier Guides where she gives tours and presentations to prospective students, and volunteering through her service fraternity Alpha Phi Omega.
Aileen Richardson was an honors Political Science/Economics student at Indiana University. She graduated with her undergraduate degree in 2013 with an honors thesis entitled: "The Political Consequence of Crisis Response: The European Political Environment 1970-2012." She has worked for Dr. David Audretsch at the School of Public and Environmental Affairs for the past two years as a research assistant and teaching assistant for the SPEA in Berlin course. She is currently a full-time staff member for the Institute for Development Strategies working on several economic analysis projects with Dr. Audretsch. She is also working on her master’s MPA with SPEA with concentrations in International Development and Public Finance. She has spent the past three summers working as an intern at German universities organizing international conferences and economic research.

Amy Schwarz is currently a SPEA dual Master of Public Affairs/Master of Arts in Arts Administration student working towards a career in education policy and music education advocacy. She graduated with a Bachelor of Music Education in 2013 from Indiana University – Purdue University Fort Wayne, where she was a member of the inaugural class of Chapman Scholars. Amy is active in the IU community as a member of Emerging Arts Leaders at IU and as a graduate assistant at the IU Cinema.

Jane S. VanHeuvelen is a PhD candidate at Indiana University. Her primary research focuses on the profession of medicine, specifically assessing how health care workers experience organizational change. She is currently serving as the Preparing Future Faculty fellow in the sociology department.

Tom VanHeuvelen is a Ph.D. candidate in Sociology at Indiana University. His interests are in political sociology and social stratification. Specifically, he is interested in cross-national comparisons of political attitudes regarding income inequality, as well as the mechanisms responsible for the growth of income inequality since the 1970s. Tom received a Master of Science in Applied Statistics at Indiana University and is specifically interested in categorical data analysis and multilevel methods.

Calvin Yahn is a student in the SPEA Masters Program studying Policy Analysis and Environmental Management. He received his BS in Biology and Environmental Science at Alma College in 2013. At Alma, he screened extracts from native plants to find anti-cancer properties as part of a research project with Dr. Brian Doyle. In Environmental Science, he designed a project to detect *Drosophila suzukii*, an invasive fruit fly with Dr. Murray Borrello. He also was a part of Tri-Beta, a National Biological Honor Society. In his free time, he enjoys singing and scuba diving.
Faculty Mentors

The Hutton Honors College would like to recognize and offer special thanks to the following faculty who served as mentors to our 2014 Hutton Honors College Undergraduate Research Symposium & Poster Fair Presenters:

Osita G. Afoaku, Clinical Professor, School of Public and Environmental Affairs

Jeffrey Alberts, Professor, School of Psychological and Brain Sciences

Shahzeen Attari, Assistant Professor, School of Public and Environmental Affairs

David B. Audretsch, Distinguished Professor, School of Public and Environmental Affairs

Farrah Bashey-Visser, Lecturer, Department of Biology

John E. Bates, Professor, Department of Psychological and Brain Sciences

Tessa Bent, Assistant Professor, Department of Speech and Hearing Sciences

Utpal Bhattacharya, Associate Professor, Kelley School of Business

Eli Blevis, Associate Professor, School of Informatics and Computing

Tracey Branam, Research Geochemist, Center for Geospatial Data Analysis

Jennifer Brass, Assistant Professor, School of Public and Environmental Affairs

Fritz Breithaupt, Professor, Department of Germanic Studies

Joshua Brown, Associate Professor, Department of Psychological and Brain Sciences

Eddie Brzostek, Research Associate, Department of Biology

Lingling Chen, Associate Professor, Department of Molecular and Cellular Biochemistry

Melissa Clark, Senior Lecturer, School of Public and Environmental Affairs

Gene Coyle, Adjunct Lecturer, School of Public and Environmental Affairs

Sameeksha Desai, Assistant Professor, School of Public and Environmental Affairs
Chris Doran, Adjunct Instructor, School of Public and Environmental Affairs

Donna Eder, Professor, Department of Sociology

Robert Eisman, Research Associate, Department of Biology

Erika Elswick, Assistant Scientist, Department of Geological Sciences

Peter Finn, Professor, Department of Psychological and Brain Sciences

Burney Fischer, Clinical Professor, School of Public and Environmental Affairs

Eileen Friel, Professor, Department of Astronomy and Astrophysics

Beth Gazley, Associate Professor, School of Public and Environmental Affairs

Michael Hamburger, Professor, Department of Geological Sciences

Stephen Harper, Assistant General Counsel, School of Public and Environmental Affairs

Bradley Heim, Associate Professor, School of Public and Environmental Affairs

Monika Herzig, Lecturer, School of Public and Environmental Affairs

William Hetrick, Professor, Department of Psychological and Brain Sciences

Peter Hollenhorst, Assistant Professor, Department of Molecular and Cellular Biochemistry

Cheryl Hughes, Lecturer, School of Public and Environmental Affairs

Robert Ivie, Professor Emeritus, Department of Communication and Culture

Thomas Kaufman, Professor, Department of Biology

Sachiko Koyama, Associate Scientist, Department Psychological and Brain Sciences

Sharron Lennon, Professor, Department of Apparel Merchandising and Interior Design

Leslie Lenkowsky, Professor, School of Public and Environmental Affairs

Fritz Lieber, Adjunct Professor, Hutton Honors College
Al Lyons, Lecturer, School of Public and Environmental Affairs

Ken Mackie, Professor, Department of Psychological and Brain Sciences

Vicky Meretsky, Associate Professor, School of Public and Environmental Affairs

Rasul Mowatt, Associate Professor, School of Public Health

Andrea Need, Lecturer, School of Public and Environmental Affairs

Mark Norrell, Lecturer, School of Public and Environmental Affairs

Robert Nosofsky, Professor, Department of Psychological and Brain Sciences

Greg Olyphant, Associate Professor, Department of Geological Sciences

Yue Pan, Researcher, Human-Computer Interaction/Design

Gary Pavlis, Professor, Department of Geological Sciences

Brian Powell, Professor, Department of Sociology

Orville Powell, Clinical Associate Professor, School of Public and Environmental Affairs

Victor Quintanilla, Associate Professor, Maurer School of Law

Shahla Ray, Lecturer, School of Public Health

David Reingold, Professor, School of Public and Environmental Affairs

William G. Resh, Assistant Professor, School of Public and Environmental Affairs

Cathleen Rodda, Graduate Student, Department of Psychological and Brain Sciences

Shawna Rohrman, Graduate Student, Department of Sociology

Rinku Roy Chowdhury, Assistant Professor, Department of Geography

Robert Rydell, Assistant Professor, Department of Psychological and Brain Sciences

Thomas Simon, Visiting Clinical Professor, School of Public and Environmental Affairs
Kosali Simon, Professor, School of Public and Environmental Affairs

Sara Skrabalak, Assistant Professor, Department of Chemistry

W. Michael Snow, Professor, Department of Physics

Nan Stager, Senior Lecturer, School of Public and Environmental Affairs

Anh Tran, Assistant Professor, School of Public and Environmental Affairs

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Michael Wade, Professor, Department of Biology

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Claire Walczak, Professor of Biochemistry and Molecular Biology

Matthias Weber, Professor, Department of Mathematics

Malcolm Winkler, Professor, Department of Biology

Robert Withnell, Associate Professor, Department of Speech and Hearing Sciences

Joanna Woronkowicz, Assistant Professor, School of Public and Environmental Affairs