SESSION I - Academic Center, Room 146
Faculty Evaluator - Anthony Cashio

Annexation of Hawai'i: Who Really Wanted It?
3:35 - 3:55 p.m.
BRENN AUKER.............................................................. Class of ’13
Major - History & Computer Science
Mentor - Katherine Tinsley

Fit in History: Changes in the Perceptions of Physical Fitness
4 - 4:20 p.m.
JAMES BARTH.............................................................. Class of ’13
Major - History
Mentor - Katherine Tinsley

Congregational Political Sermons and the American Revolution: A
Natural Justification
4:25- 4:45 p.m.
ELIZABETH STULL........................................................ Class of ’14
Major - History
Mentors - Marjan Boogert & Katherine Tinsley

SESSION II - Academic Center, Room 149
Faculty Evaluator - Frank Olive

Listening to Quiet: Giving Introverts a Chance to Speak
3:35 - 3:55 p.m.
JESS RINEHART.............................................................. Class of ’13
Major - Communication Studies
Mentor - Dave Switzer

Cross-Cultural Communication in Business: A Comparative Study of
Managerial Communication
4 - 4:20 p.m.
KATRIN MUSER .............................................................. Class of ’15
Major - Sport Management
Mentors - Dave Switzer & Timothy Ogden

The Permissive Society and Labour Government in 1960s Britain
4:25 - 4:45 p.m.
ASHLIE BIDDLE .............................................................. Class of ’13
Major - History
Mentor - Mark Angelos

SESSION III - Academic Center, Room 232
Faculty Evaluator - Michelle Calka

Venus, Cupid, Folly, and Time: Evidence of Mannerism’s Genius
3:35 - 3:55 p.m.
AMANDA KEATING ...................................................... Class of ’14
Major - Art
Mentor - Thelma Rohrer

Religion, Landscape, and Disease in German Renaissance Art
4 - 4:20 p.m.
FELICIA NICHOLS ...................................................... Class of ’14
Major - Art
Mentor - Thelma Rohrer

Rhythmic Ambiguity in Fauré’s Nocturne Opus 114, No. 1
4:25 - 4:45 p.m.
OSCAR ERWIN .............................................................. Class of ’14
Major - Music Composition & Theory
Mentor - John Planer
SESSION IV - Academic Center, Room 234  
Faculty Evaluator - John Deal

Hamlet's Morality in Text and Production  
3:35 - 3:55 p.m.  
EMILY KRABACH ....................................................... Class of ’15  
Major - English  
Mentor - Stacy Erickson

Authors are Useless - A commentary on the motivation of readers and their ability to create a text's true meaning  
4 - 4:20 p.m.  
NICHOLAS SALUPO ....................................................... Class of ’13  
Major - Athletic Training & Biology-Chemistry  
Mentor - Stacy Erickson

The Horned God: Resurrecting a New Masculinity  
4:25 - 4:45 p.m.  
SAMUEL OTT ....................................................... Class of ’13  
Major - Religion  
Mentor - Kate Eisenbise

SESSION V - Academic Center, Room 236  
Faculty Evaluator - Kim Duchane

Open Yet Closed: The Story of Ministerial Leadership in the Church of the Brethren  
3:35 - 3:55 p.m.  
TODD EASTIS ....................................................... Class of ’14  
Major - Sociology & Religion  
Mentor - Walt Wiltschek

Medievalism, War, and Cheese: How Joan of Arc Inspires Nations  
4 - 4:20 p.m.  
SHANELL BRAZO ....................................................... Class of ’14  
Major - History  
Mentor - Janina Traxler

SESSION VI - Academic Center 238  
Faculty Evaluator - Mike Martynowicz

4:25 - 4:45 p.m.  
KATY HERDER .......................................................... Class of ’14  
Major - Peace Studies  
Mentor - Katy Gray Brown

Students' Perceptions of Sexual Assault at a Small Liberal Arts College  
3:35 - 3:55 p.m.  
BRANDY LEEPER .......................................................... Class of ’14  
Major - Criminal Justice & Psychology  
MENTOR TRAXLER .......................................................... Class of ’15  
Major - Psychology  
Mentors - Rusty Coulter-Kern & Hannah Stork

Reasons Why Students Return to College: A Qualitative Analysis  
4 - 4:20 p.m.  
DEREK JONES .......................................................... Class of ’13  
Major - Psychology  
Mentor - Rusty Coulter-Kern  
ANDREW KURTZ .......................................................... Class of ’13  
Major - Psychology  
Mentor - Rusty Coulter-Kern

SESSION VII - Academic Center, Room 241  
Faculty Evaluator - Michael Slavkin

I-STEP or Misstep: Examining the Correlation between Students’ Performance on Acuity Tests and the I-STEP  
3:35 - 3:55 p.m.  
JORDAN KINN .......................................................... Class of ’13  
Major - Early & Middle Childhood Generalist & Mild Interventions  
Mentor - Heather Schilling
SESSION VIII - Academic Center, Room 354
Faculty Evaluator - Zach Dougal

The Effect of Smoking and Age on Oxygen Ventilatory Equivalents in Sedentary Individuals
3:35 - 3:55 p.m.
MAKENNA HAMILTON ............................................. Class of ’14
Major - Athletic Training
LEE MELLING ........................................................ Class of ’13
Major - Exercise Science & Fitness
Mentor - Mark Huntington

Effects of Environmental Temperature on Blood Pressure and Oxygen Consumption During Exercise
4 - 4:20 p.m.
CHRISTINA GONZALEZ ........................................... Class of ’14
Major - Athletic Training
JACOB MEYER ........................................................ Class of ’14
Major - Athletic Training
Mentor - Mark Huntington

The Effects of Energy Drink Consumption on Lactic Acid Formation During Exercise
4:25 - 4:45 p.m.
ROBERT HERITZ ...................................................... Class of ’14
Major - Exercise Science & Fitness
KYLE YODER .......................................................... Class of ’14
Major - Exercise Science & Fitness
Mentor - Mark Huntington

SESSION IX - Academic Center, Room 356
Faculty Evaluators - Andy Rich

Research in Osteopathic Medicine: An Assessment on Examiner Reliability of the SA-201 Instrument
3:35 - 3:55 p.m.
BRANDON BACCARI ............................................. Class of ’13
Major - Biology-Chemistry
Mentor - Rachel Polando

Square Achievement Game
4 - 4:20 p.m.
SARAH CARMAN .................................................... Class of ’14
Major - English
MARCUS WYATT ..................................................... Class of ’14
Major - Mathematics & Computer Science
Mentor - Timothy Brauch

2012 Eel River Recreational Use Survey
4:25 - 4:45 p.m.
MATTHEW MILLER ................................................... Class of ’14
Major - Environmental Studies
Mentor - Matt Burlingame

SESSION X - Academic Center, Room 358
Faculty Evaluator - Sreenath Majumder

Genetic Characterization of the Chickadee Hybrid Zone in Northeast Indiana
3:35 - 3:55 p.m.
BENJAMIN CLOUD ............................................. Class of ’13
Major - Biology & Environmental Studies
Mentors - Kristen Short & Jerry Sweeten
Redside Dace (Clinostomus elongatus) in Mill Creek, Wabash County, Indiana: A Strategy for Research and Augmentation
4 - 4:20 p.m.
AMBER MELICK ............................................................. Class of ’13
Major - Biology & Environmental Studies
Mentor - Jerry Sweeten

Agonistic Behaviors of Male Deer Mice (Peromyscus maniculatus) and Their Investigation of Females Based on the Number of Females Present
4:25 - 4:45 p.m.
KELSIE BIGLIN ............................................................. Class of ’13
Major - Biology
Mentor - Aron Costello

SESSION XI - Academic Center, Room 362
Faculty Evaluator - Kristen Short

Water Splitting in Photosystem II
3:35 - 3:55 p.m.
EMILY EHLERDING ....................................................... Class of ’14
Major - Chemistry & Physics
Mentor - Christer Watson

Emissivity of β-Cloth after 8.6 Years Exposure to Low Earth Orbit
4 - 4:20 p.m.
ALYSSA LOOS ............................................................. Class of ’13
Major - Physics
Mentor - Greg Clark

Fluorescent Carbon Nanodots: A Procedural Replication of a Green Synthesis from Soy Milk
4:25 - 4:45 p.m.
RODNEY TIGAA ............................................................. Class of ’13
Major - Chemistry
Mentor - Kathryn Davis

SESSION XII - FIRST YEAR SEMINAR SESSION - Academic Center, Room 364
Faculty Evaluator - Leonard Williams

No Bones About it: The History of Joint Replacement
3:35 - 3:55 p.m.
BRIAN ANDERSON .......................................................... Class of ’16
Major - Biology-Chemistry
Mentor - Beate Gilliar

From Bra Burning to Brief Cases and Stilettos: Have Women Really Advanced?
4 - 4:20 p.m.
KATHERINE SKEEN .......................................................... Class of ’16
Major - Political Science & Economics
Mentor - Beate Gilliar

Jesus: Here and Now
4:25 - 4:45 p.m.
JACOB RAY ................................................................. Class of ’16
Major - English
Mentor - Justin Lasser

SESSION XIII - FIRST YEAR SEMINAR SESSION - Academic Center, Room 369
Faculty Evaluator - Jeff Diesburg

Sexuality in Fairy Tales: Determining the Roles in “Little Red Riding Hood”
3:35 - 3:55 p.m.
RACHEL LAING ............................................................. Class of ’16
Major - English & Language Arts Education
Mentor - Katharine Ings
Give Peace a Chance: Domestic Resistance to United States Militarism in Southeast Asia
4 - 4:20 p.m.
SAMUEL TORGERSON................................. Class of ’16
Major - Peace Studies
Mentor - Katy Gray Brown

Academic vs. Non-Academic Sources on Being Personally Creative
4:25 - 4:45 p.m.
EMILY PLEADWELL................................. Class of ’15
Major - Mathematics
Mentor - Jim Falkiner

SESSION XIV  - POSTER SESSION - Speicher Room, upper Union
Faculty Evaluators - Arturo Yañez, Jeffrey Osborne

Group A - 3:30 - 3:50 p.m.
Identification of Pathogenic and Non-Pathogenic Skin Flora on Equipment Used by the Manchester University Football Team in the Fall of 2012
AUDREY DEITRICH................................. Class of ’13
Major - Biology
Mentor - Rachel Polando

Catalyst Processing and Analysis for Green Fuel Production
MACIE PRICE........................................ Class of ’14
Major - Chemistry
Mentor - Susan Klein

Hedgehog Signaling Mediates Interferon-Gamma Induced Mesenchymal Stem Cell Proliferation and Recruitment to the Stomach
MATTHEW HELM................................. Class of ’13
Major - Biology
Mentor - Rachel Polando

Examination of Flute, Saxophone, and Trumpet for S. aueres, B. cerues, and N. mucosa
TIFFANY YORK................................. Class of ’14
Major - Biology
Mentor - Rachel Polando

Group B - 3:50 - 4:10 p.m.
The Last Time I Went to a Cocktail Party, I Lost My Poodle Skirt
JOEY HOLT........................................ Class of ’13
Major - Psychology
ZABRIAN MILLS................................. Class of ’14
Major - Psychology
STEPHANIE WILSON............................ Class of ’13
Major - Psychology
Mentor - Ashleigh Maxcey-Richard

Parental Involvement and College Student Academic Success
ASHLEY LANDRUM............................. Class of ’14
Major - Psychology
LOUISE MAGIERA............................... Class of ’14
Major - Psychology
JOHN MCCALL................................. Class of ’14
Major - Psychology
Mentor - Marcie Coulter-Kern

Remembering the Get-Away Car Hurts Your Memory for the Robber: Retrieval-Induced Forgetting for Visual Images
DYLAN HINER................................. Class of ’13
Major - Psychology
TED MALDONADO............................. Class of ’14
Major - Psychology
JESSICA STAFFORD............................ Class of ’13
Major - Psychology
Mentor - Ashleigh Maxcey-Richard
The Relationship between Job Performance and Job Satisfaction in College Students

KAITLYN DEWITT ................................................ Class of ’13
Major - Psychology
MARGARET HESS ................................................. Class of ’13
Major - Political Science & Psychology
TAYLOR JANTZI ................................................. Class of ’15
Major - Psychology
MEGAN SPICE ................................................. Class of ’15
Major - Psychology
Mentor - Rusty Coulter-Kern

Group C - 4:10 - 4:30 p.m.

Analysis of Student Workbook Use in IPPE Community Pharmacy
EZZA IFTIKHAR ................................................. Class of ’16
Major - Doctorate of Pharmacy
Mentors - Ahmed Abdelmageed & Mary Kiersma

Assessment of Factors Affecting the Use of Instructional Instruments During Pharmacy Practice Experience
JUSTIN CORNEWELL ........................................... Class of ’16
Major - Doctorate of Pharmacy
Mentors - Ahmed Abdelmageed & Mary Kiersma

Evaluation of Workbook and Instrument Uses for IPPE and APPE Rotations in Pharmacy Schools
KIMBERLY PERKINS ............................................. Class of ’16
Major - Doctorate of Pharmacy
Mentors - Ahmed Abdelmageed & Mary Kiersma

Group D - 4:30 - 4:50 p.m.

A Case Study Presentation on Synovial Sarcoma in a Track Athlete
MAKENNA HAMILTON ........................................... Class of ’14
Major - Athletic Training
Mentor - Erin Foreman

The Effects of Vocal Cue-Training on Lie Detection
JESSICA BOSTIC ................................................. Class of ’15
Major - Psychology
ASHLEA KOEHL ................................................. Class of ’14
Major - Psychology
Mentor - Marcie Coulter-Kern

Applied Program Evaluation & Management: Manchester University Intramural Program
TYLER KREMPASKY ............................................. Class of ’13
Major - Sport Management
Mentor - Ryan Hedstrom
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Reception and Awards

5:15 - 6 p.m.
upper Union rooms
All are welcome.

Student Research Symposium Committee
Lynne F. Margolies, chair
Timothy M. Brauch
Ejenobo Oke

Our sincere thanks to all of the people who worked hard to make this year’s Manchester University Student Research Symposium a success, including the student conveners, the faculty evaluators, the faculty mentors, Chartwells, and anyone else we may have missed!

A special thanks to Katie Winkler, administrative assistant, and Arturo Yañez, photographer.

We invite you to view the Manchester University 2013 Annual Juried Student Art Show on display in Link Gallery, Otho Winger Hall.

We recognize and appreciate your dedication to the students of Manchester University.