17th ANNUAL
Student Research Symposium
2015
Manchester University
Manchester University
Student Research Symposium
Sponsored by Jeffrey R. Breese
Vice President and Dean for Academic Affairs
April 24, 2014
3 - 6:30 p.m.

Oral Presentation Sessions – Academic Center, Various Rooms

Audience Arrival in Presentation Rooms, Academic Center
3 - 3:30 p.m.

Session I - Academic Center, Room 133
Faculty Evaluator: Mr. Frank Olive
Student Convener: Alexandria Spillman

Adaptation at its Finest: the Girl Scouts of America
3:35 - 3:55 p.m.
Amanda Hendricks .............................................................. Class of ’15
Major: History
Mentor: Dr. Katherine Tinsley

Escaping the Tower: The Emancipation of Female Protagonists and Authors of Contemporary Fairytales
4 - 4:20 p.m.
Emily Krabach ................................................................. Class of ’15
Major: English
Mentor: Dr. Katharine Ings

An Analysis of Meghan Trainor’s Song “All About That Bass”
4:25 - 4:45 p.m.
Ellyn Sallee ................................................................. Class of ’15
Major: Communication Studies
Mentor: Dr. Michelle Calka
Compared Differences in VO2max During Non-fasting and Fasting Cardiorespiratory Exercise
3:35 - 3:55 p.m.

Raquel Trejo ................................................................. Class of ’16
Major: Exercise Science and Fitness

Ronkeshia Howard ....................................................... Class of ’15
Major: Athletic Training
Mentor: Dr. Mark Huntington

What Undergraduate Student Spectators Want from University Sporting Events
4 - 4:20 p.m.

April Mullen ................................................................. Class of ’15
Major: Psychology

Larissa Valdez .............................................................. Class of ’17
Major: Educational Studies

Emily Cattin ................................................................. Class of ’17
Major: Psychology
Mentor: Dr. Marcie Coulter-Kern

The Lacanian Subject and the Question of God
3:35 - 3:55 p.m.

Shannon Stephan ........................................................ Class of ’15
Major: Management, Accounting

Emily Willmann ........................................................... Class of ’15
Major: Biology-Chemistry
Mentor: Dr. Justin Lasser
CS as a Tracer for Star Formation
4 - 4:20 p.m.
Nicolas Quintanar ........................................................................ Class of ’15
Major: Physics, Mathematics
Mentor: Dr. Christer Watson

The Vatican Gallery of Maps: A Symbol of Early Ideology within the Papacy
4:25 - 4:45 p.m.
Cheyenne Ramsey ........................................................................ Class of ’17
Major: Art, Spanish
Mentor: Ms. Thelma Rohrer

Session IV - Academic Center, Room 232
Faculty Evaluator: Dr. Michelle Calka
Student Convener: Andrew Ellam

Comic Books and Superheroes: Militarized Pop Culture and the American Soldier
3:35 - 3:55 p.m.
Lacy Emery ........................................................................ Class of ’15
Major: Political Science, Peace Studies
Mentor: Dr. Katy Gray Brown

Strategic Bombing and Drone Warfare: A Just War Critique
4 - 4:20 p.m.
Samuel Torgerson ........................................................................ Class of ’15
Major: Peace Studies, Philosophy
Mentor: Dr. Katy Gray Brown

Colonialism and Modern Income Levels
4:25 - 4:45 p.m.
Caleb Leininger ........................................................................ Class of ’16
Major: Spanish
Mentor: Dr. Sreenath Majumder
Session V - Academic Center, Room 234
Faculty Evaluator: Dr. Jeff Osborne
Student Convener: Trinity Schleich

Giotto’s Bardi Chapel Paintings: Exposing the Grey Areas of Restoration
3:35 - 3:55 p.m.
Abigail Lynn................................................................. Class of ’17
Major: Art
Mentor: Ms. Thelma Rohrer

Age Bias in Unemployment: A Regression Analysis
4 - 4:20 p.m.
Keith Kline................................................................. Class of ’15
Major: Accounting, Economics
Mentor: Mr. Matthew Hendryx

Effects of Low Level Laser Therapy on Internal Rotation of the Glenohumeral Joint
4:25 - 4:45 p.m.
Raymond Wilson............................................................. Class of ’15
Major: Athletic Training
Mark Sexton................................................................. Class of ’15
Major: Athletic Training, Exercise Science & Fitness
Mentor: Mr. Jeff Beer

Session VI - Academic Center, Room 236
Faculty Evaluator: Ms. Edith Sicken
Student Convener: Emily Pleadwell

Aggregate Pit Reclamation: Population Density of Bluegill (Lepomis macrochirus) in Fidlers Pond Located in Goshen, Indiana
3:35 - 3:55 p.m.
Silas Sims................................................................. Class of ’15
Major: Environmental Studies
Mentor: Dr. Jerry Sweeten
Occupancy and Detection Probabilities: American Kestrel (Falco sparverius) in Agricultural Landscape of Northern Indiana
4 - 4:20 p.m.
Collin Huffine ........................................................................................................ Class of ’15
Major: Environmental Studies
Mentor: Dr. Jerry Sweeten

Session VII - Academic Center, Room 238
Faculty Evaluator: Dr. John Planer
Student Convener: Becca Williams

Bacteria Degradation of Styrene and Synthesis of 1,3-diphenylpropene
3:35 - 3:55 p.m.
Loughlin Wylie ...................................................................................................... Class of ’15
Major: Chemistry, Mathematics
Mentor: Dr. Jeff Osborne

Effects of Low Level Laser Therapy as a Treatment for Plantar Fasciitis in Two Female Cross Country Runners: A Case Study
4 - 4:20 p.m.
Benjamin Charles .................................................................................................. Class of ’16
Major: Masters of Athletic Training
Mentor: Mr. Jeff Beer

Undergraduate, Graduate and Professional Student Poster Session – Lahman Room, Jo Young Switzer Center, upstairs
4:45 – 5:30 p.m.

Comparing Student and Instructor Views of Teaching Evaluations
Alivia Benbow ........................................................................................................ Class of ’15
Major: Psychology
Allison O’Neill .................................................................................................... Class of ’15
Major: English, Psychology
Mentor: Dr. Marcie Coulter-Kern
A Case Study Presentation on Hand-Foot-and-Mouth Disease in a D3 Football Team: The Importance of Controlling a Communicable Disease

**Jaimie Childress** ................................................................. Class of ’15
Major: Exercise Science & Fitness, Athletic Training
Mentor: Ms. Erin Foreman

A Case Study Presentation on Neurocardiogenic Syncope in a Female Basketball Player: The Importance of Understanding Signs and Symptoms

**Brandy Crouse** ................................................................. Class of ’16
Major: Athletic Training
Mentor: Ms. Erin Foreman

Dissociating Remembering from Forgetting in Recognition-Induced Forgetting

**Rehab Dahab** ................................................................. Class of ’15
Major: Psychology
Mentor: Dr. Ashleigh Maxcey

Screening for ATP Sulfurylase Interacting Proteins in Plants

**Jessica Noll** ................................................................. Class of ’16
Major: Biochemistry
Mentor: Dr. Christer Watson

A Case Study Presentation on a Lacerated Spleen in a High School Football Player: The Importance of Immediate Medical Referral

**Hailee Sizemore** ................................................................. Class of ’15
Major: Athletic Training
Mentor: Ms. Erin Foreman

Comparing Scheduling Preferences of Students and Professors

**Lucas Al-Zoughbi** ................................................................. Class of ’17
Major: Peace Studies
Mentor: Dr. Marcie Coulter-Kern
Using APA Guidelines to Improve Effectiveness of Undergraduate Studies in Psychology

**Caniece Leggett** ................................................................. *Class of ’16*
Major: Psychology

**Jarod Schrock** ............................................................... *Class of ’16*
Major: Educational Studies, Psychology
Mentor: Dr. Marcie Coulter-Kern

Determining the Usefulness of the Strong Interest Inventory using Models of Person-Environment Fit

**Allyson Smith** ................................................................. *Class of ’16*
Major: Psychology
Mentor: Dr. Marcie Coulter-Kern

RNA/DNA Ratio in the Mantle Tissue of the Freshwater Mussel (Lampsilis siliquoidea)

**Kasey Brubaker** ............................................................ *Class of ’15*
Major: Biology
Mentor: Dr. Kristen Short

Student Preferences in Their Academic Advisor

**Megan Spice** ................................................................. *Class of ’15*
Major: Psychology
Mentor: Dr. Marcie Coulter-Kern

Dithiolethiones as Inducers of Glutathione: Further Structure-activity Relationships Studies and Development of a Pharmacophore Model

**Hitesh Mistry** ................................................................. *Class of ’16*
Degree: PharmD

**Quang Tran** ................................................................. *Class of ’16*
Degree: PharmD
Mentor: Dr. Dennis Brown

Linking Pharmacology to Clinical Therapeutics: An Interdisciplinary Laboratory Experience in Optimizing Antiplatelet Therapy Using Pharmacogenetic Data

**Stefanie Hulce** ............................................................. *Class of ’16*
Degree: PharmD
Mentor: Dr. Diane Calinski
Pharmacological Evaluation of 2-Amino Substituted Dithiolethiones as Potential Neuroprotective Agents

Steven Fuentes ................................................................. Class of ’17
Degree: PharmD
Mentor: Dr. Dennis Brown

Effects of Low Level Laser Therapy as a Treatment for Plantar Fasciitis in Two Female Cross Country Runners: A Case Study

Benjamin Charles .............................................................. Class of ’16
Degree: Masters of Athletic Training
Mentor: Mr. Jeff Beer

Student Keynote Speaker, Hoff/Lahman Rooms, Jo Young Switzer Center, upstairs
6 – 6:20 p.m.

Peacemaking Embodied: Dance as a Connecting Thread Weaving Senegalese Ethnicities

Rachel Ulrich ................................................................. Class of ’15
Major: Sociology
Mentor: Dr. Abigail Fuller
<table>
<thead>
<tr>
<th>Name</th>
<th>Time</th>
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<tbody>
<tr>
<td>Al-Zoughbi, Lucas</td>
<td>4:45 - 5:30 p.m.</td>
<td>Lahman Room</td>
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<td>Benbow, Alivia</td>
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<td>Brubaker, Kasey</td>
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<td>Cattin, Emily</td>
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<td>Charles, Benjamin</td>
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<td>Childress, Jaimie</td>
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<td>Crouse, Brandi</td>
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<td>Dahab, Rehab</td>
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<td>Emery, Lacy</td>
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<td>Fuentes, Steven</td>
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<td>Hendricks, Amanda</td>
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<td>Howard, Ronkshia</td>
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<td>Huffine, Collin</td>
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<td>Hulce, Stefanie</td>
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<td>Krabach, Emily</td>
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<td>Leggett, Caniece</td>
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<td>Leininger, Caleb</td>
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<td>Lynn, Abigail</td>
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<td>O’Neill, Allison</td>
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<td>Quintanar, Nicolas</td>
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<td>Ramsey, Cheyenne</td>
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<td>Ulrich, Rachel</td>
<td>6 - 6:20 p.m.</td>
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<td>Wylie, Loughlin</td>
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Hoff and Lahman Rooms are located in the Jo Young Switzer Center, upstairs.
Student Research Symposium
Master Itinerary

Academic Center
3 p.m. Programs Available, Lobby
3:35 - 3:55 p.m. Oral Presentation 1, Various Rooms
4 - 4:20 p.m. Oral Presentation 2, Various Rooms
4:25 - 4:45 p.m. Oral Presentation 3, Various Rooms

Jo Young Switzer Center
4:45 - 5:30 p.m. Poster Presentations, Lahman Room
5:40 p.m. Symposium Participant Group Photo, Stairwell
5:30 - 5:55 p.m. Refreshments for Presenters and Guests, Hallway
6 - 6:20 p.m. Student Keynote Speaker Presentation, Hoff/Lahman Rooms
6:20 - 6:30 p.m. Presentation of Awards, Hoff/Lahman Rooms

Student Research Symposium Committee
Ejenobo Oke, Chair
Marcie Coulter-Kern
Kathrine Dwyer
Katharine Ings
Christer Watson

Our sincere thanks to all of the people who worked to make this year’s Manchester University Student Research Symposium a success, including the student conveners, faculty evaluators, faculty mentors, Chartwells and many more. We recognize and appreciate your dedication to the students of Manchester University.