

**26<sup>th</sup> ANNUAL**  
**Student Research**  
**Symposium**

**Friday, April 26, 2024**

**3:30 – 7:00 p.m.**



**Manchester University**  
**Student Research Symposium**

Sponsored by the  
Office of Academic Affairs  
Friday, April 26, 2024  
3:30- 7 p.m.

**Master Itinerary**

**Academic Center**

3:30 p.m. Programs available in Academic Center Lobby  
3:30 p.m. Rooms open for Oral Presentations  
3:35 – 3:55 p.m. Oral Presentations, Various Rooms  
3:55 – 4:15 p.m. Oral Presentations, Various Rooms  
4:15 – 4:35 p.m. Oral Presentations, Various Rooms

**Jo Young Switzer Center**

4:45 – 5:55 p.m. Poster presentations and Refreshments - Speicher Room  
6:00 – 6:30 p.m. Student Keynote Presentation - Lahman Room  
6:30 – 6:50 p.m. Presentation of Awards

**\*Group picture immediately following awards\***

**2024 Student Research Symposium Committee**

Dr. Jennifer Robison, Assistant Professor of Biology, Chair  
Dr. Dennis Brown, Associate Professor of Biology  
Dr. Marcie Coulter-Kern, Professor of Psychology  
David McGrady, Associate Professor of Accounting and Finance  
Dr. Katharine Ings, Professor of English  
Traci Garcia, Representing Academic Affairs

**Oral Presentations: Session I**

Cunningham Academic Center, Room 146

**The Reshaping of Real-Life Crimes in Agatha Christie’s Detective Novels: An Argument for “Closure”**

3:35 – 3:55 p.m.

**Madelyn Hosford..... Class of 2024**

Major(s): History

Faculty Mentor: Dr. Uma Ganesan

**Counterculture Personified: Comparing Woodstock and Altamont, 1969**

3:55 – 4:15 p.m.

**Cade MacAleese..... Class of 2024**

Major(s): History

Faculty Mentor: Dr. Uma Ganesan

**Understanding Trends in Division III Football Game Attendance**

4:15 – 4:35 p.m.

**Lauren Akles..... Class of 2025**

Major(s): Marketing

**Brayden Sayre..... Class of 2024**

Major(s): Marketing

**Jonah Randle..... Class of 2024**

Major(s): Marketing

Faculty Mentor: Dr. Sun Kang

**Oral Presentations: Session II**

Cunningham Academic Center, Room 149

**Internship with the DNR: Preserving our Lakes**

3:35 – 3:55 p.m.

**Lyssa Bowers .....Class of 2024**

Major(s): Environmental Studies

Faculty Mentor: Dr. Aron Costello-Harris

**A Data Model Case Study: Investigating Nebraska's Capacity to Remove PFAS from Drinking Water**

3:55 – 4:15 p.m.

**Chloe Yoder..... Class of 2024**

Major(s): Biology-Chemistry

Faculty Mentor: Dr. Jeff Osborne

**Oral Presentations: Session III**

Cunningham Academic Center, Room 234

***B. multivorans* Study of Supposed Carbonyl Reductase 5U1P**

3:35 – 3:55 p.m.

**Connor Hamilton..... Class of 2025**

Major(s): Chemistry

Faculty Mentor: Dr. Kyle Watson

**Evaluation of Hetero Diels-Alder Cycloadducts as Potential Antibiotics**

3:55 – 4:15 p.m.

**Natalie Kotlin.....Class of 2024**

Major(s): Chemistry

Faculty Mentor: Dr. Kyle Watson

**The Biodegradation of 1, 3-Diphenylpropane**

4:15 – 4:35 p.m.

**Bradley Walling.....Class of 2026**

Major(s): Biology-Chemistry

Faculty Mentor: Dr. Jeff Osborne

**Oral Presentations: Session IV**

Cunningham Academic Center, Room 236

**Impact of Heat Shock Protein 90 Isoform Inhibitors on Lipopolysaccharide (LPS)-Induced Inflammatory Cytokine Production in BV-2 Microglial Cells**

3:35 – 3:55 p.m.

**Rayan Nouredine.....Graduate, Class of 2026**

Major(s): Pharmacy

Faculty Mentor: Dr. Wei Lei

**Discovering Novel Compounds with Glutaminase Inhibition and Nrf2 Activation Dual Activity**

3:55 – 4:15 p.m.

**Florence Umutoni.....Graduate, Class of 2025**

Major(s): Pharmacy

Faculty Mentor: Dr. Wei Lei

**Research Posters**

4:45 – 5:55 p.m.

Speicher/Lahman Room, Jo Young Switzer Center

**Do Different Grading Styles Affect Students Stress Levels**

**Erin Farmwald.....Class of 2026**

Major(s): Psychology

**Elaina Halferty.....Class of 2025**

Major(s): Psychology

**Cameron Hovey.....Class of 2025**

Major(s): Psychology

Faculty Mentor: Dr. Marcie Coulter-Kern

**Investigating Potential Transgenic Silencing in Three RD29a::GFP/GUS Transgenic Soybean Line**

**Rachel Fedor.....Class of 2025**

Major(s): Biology-Chemistry

Faculty Mentor: Dr. Jennifer Robison

**Identifying and Cloning the MED16 Gene from Soybean and Arabidopsis**

**Ashlynn Malloy.....Class of 2024**

Major(s): Biology

**Brent Kanuho.....Class of 2024**

Major(s): Biology

Faculty Mentor: Dr. Jennifer Robison

**Investigating the Timing of Wound-Induced Protein Expression Between Systemic and Wounded Tissue**

**Antonae Cofield.....Class of 2025**

Major: Biology

Faculty Mentor: Dr. Jennifer Robison

**Student vs. Student-Athletes Mood in the Classroom**  
**Chloe Patton.....Class of 2026**

Major(s): Psychology

**Rylee Stephany.....Class of 2026**

Major(s): Psychology

**Jessica Stephenson.....Class of 2026**

Major(s): Psychology.

**Alexia Goodman.....Class of 2026**

Major(s): Psychology

Faculty Mentor: Dr. Marcie Coulter-Kern

**What are the Benefits of Providing Psychological, Academic, Emotional, and Social Support to Gifted and High Achieving Students?**

**Alex Felton.....Class of 2024**

Major(s): Psychology

Faculty Mentor: Dr. Marcie Coulter-Kern

**The Effects of Collegiate Sports and Extracurriculars on Student's Social Lives and Motivation**

**Penelope Eash.....Class of 2026**

Major(s): Psychology

**Madalynn Mercer.....Class of 2026**

Major(s): Psychology

**Brenna Holdcraft.....Class of 2026**

Major(s): Psychology

Faculty Mentor: Dr. Mark McCoy

**Testing Methods for Determining Iron Content in Supplement Tablets**

**Rachael Pickett.....Class of 2024**

Major(s): Chemistry

Faculty Mentor: Dr. Kathryn Davis

**Motivation in the Classroom**

**Audbriana Turnbow.....Class of 2026**

Major(s): Psychology

**Sarah Cavender.....Class of 2024**

Major(s): Psychology

**Alex Riley.....Class of 2024**

Major(s): Psychology

Faculty Mentor: Dr. Marcie Coulter-Kern

**Basal Membrane Disruptions and Immune Cell Infiltration: Insights into Wound-Induced Tumor Development**

**Evelyn Minton.....Class of 2025**

Major(s): Biology-Chemistry

**Fast-Form Media and Its Effect on Attention Span**  
**Avery Stockwell**.....Class of 2026  
Major(s): Psychology  
**Hannah Bailey** .....Class of 2026  
Major(s): Psychology  
Faculty Mentor: Dr. Marcie Coulter-Kern

**Exploring the Relationship between ACEs and Disordered Eating**  
**Adam Bubelenyi**.....Class of 2025  
Major(s): Psychology  
**Alexandra Oden** .....Class of 2025  
Major(s): Psychology  
**Collin Harris** .....Class of 2025  
Major(s): Psychology  
Faculty Mentor: Dr. Marcie Coulter-Kern

**Characterization of Cytochrome P450-Mediated Metabolism of RITA**  
**Emily Burdick**.....Class of 2026  
Major(s): Biology-Chemistry  
Faculty Mentor: Dr. Diane Calinski

**The Impact of the Great Migration (1900-1970) on Indiana's Politics and Economics**  
**Jacob Caudill**.....Class of 2025  
Major(s): History  
Faculty Mentor: Dr. Uma Ganesan

**Synthesis of 1,3,5-triphenylpentane by Wolff-Kisner**  
**Logan Hughes**.....Class of 2024  
Major(s): Chemistry  
Faculty Mentor: Dr. Jeff Osborne

**Investigating the Timing of Local and Systemic Exogenous Jasmonic Acid-Induced Protein Expression in Soybean Leaves**  
**Jisaly Romano**.....Class of 2025  
Major(s): Biology-Chemistry  
Faculty Mentor: Dr. Jennifer Robison

**Investigating the Local and Systemic Wounding Responses in Soybean**  
**Madison Hilliker**.....Class of 2025  
Major(s): Medical Technology  
Faculty Mentor: Dr. Jennifer Robison

**Presenting a Breath of Fresh Air**

**Enrique Salazar .....Class of 2024**

Major(s): Criminology

Faculty Mentor: Dr. Jared Friesen

**Diagnostic Utility of the SCAT6 Compared to SCAT5**

**Hannah Detmer .....Graduate, Class of 2025**

Major(s): Athletic Training

**Catherine Hughes .....Graduate**

Major(s): Athletic Training

**Yilian Rodriguez .....Graduate**

Major(s): Athletic Training

**Jazlynn Davis .....Graduate**

Major(s): Athletic Training

Faculty Mentor: Mark Myers

**Comparison of Cluster Tests for Superior Labral Anterior Posterior (SLAP) Lesions**

**Abby Philips .....Graduate, Class of 2025**

Major(s): Athletic Training

**Hayley Demler .....Graduate, Class of 2024**

Major(s): Athletic Training

Faculty Mentor: Mark Myers



## **Keynote Speaker**

Lahman Room, Jo Young Switzer Center

6:00 – 6:30 p.m.

**Essential Oils and Antibiotics: Synergizing to Combat Bacteria**

**Ruby Rusk.....Class of 2024**

Major(s): Biology-Chemistry

Faculty Mentor: Dr. Kyle Watson

Our Sincere thanks to all the people who worked to make the 2024 Manchester University Student Research Symposium a success. Special thanks to our student conveners, faculty evaluators, faculty mentors, and Sodexo catering. We recognize and appreciate your dedication to the students of Manchester University.



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