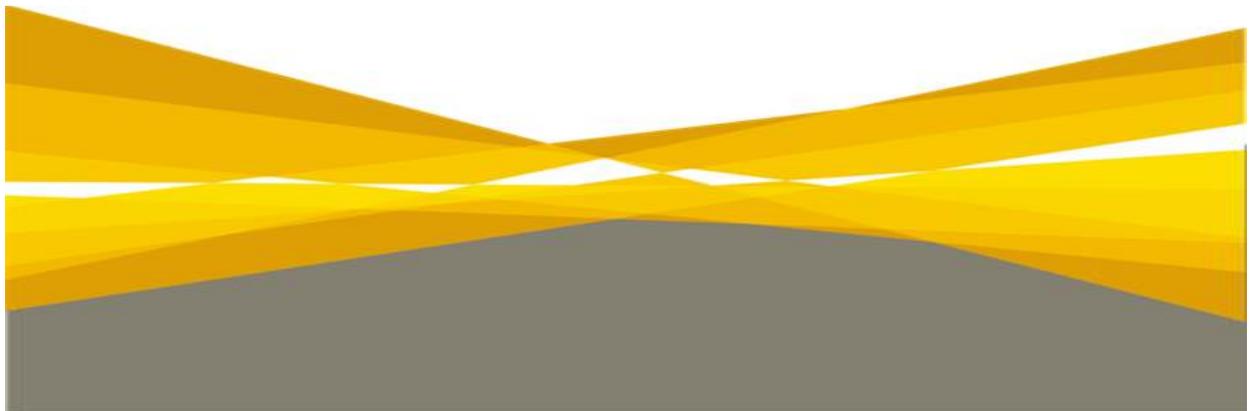


27th ANNUAL
Student Research
Symposium

Wednesday, April 23, 2025

8:00 a.m. – 3:00 p.m.



Manchester University
Student Research Symposium

Sponsored by the
Office of Academic Affairs
Wednesday, April 23, 2025
8:00 a.m. - 3:00 p.m.

Master Itinerary

Look for QR codes posted for the 2025 program

- 8:00 a.m.** Opening Address with President Stacy Young – Lahman Room (JYSC)
8:30 – 9:00 a.m. Alumna Speaker – Lahman Room (JYSC)
- 9:10 – 10:10 a.m.** Breakout Session 1 – Various Rooms (see program)
First Session 9:10 – 9:30 am
Second Session, 9:40 – 10:00 am
- 10:15 – 11:15 a.m.** Poster Session 1 – Speicher Room (JYSC)
11:20 – 12:15 p.m. Lunch (not included)
- 12:20 – 1:15 p.m.** Breakout Session 2 – Various Rooms (see program)
First Session 12:20 – 12:40 pm
Second Session 12:50 – 1:10 pm
- 1:20 – 2:20 p.m.** Poster Session 2 – Speicher Room (JYSC)
2:30 – 3:00 p.m. Keynote – Lahman Room (JYSC)
3:00 p.m. Closing and Group Picture

Group picture immediately following closing

Alumna Speaker

Lahman Room, Jo Young Switzer Center

8:30 a.m.



Sarah Rohr is a 2023 Manchester University graduate who completed her degree *summa cum laude* in Psychology. At Manchester, she began to cultivate her passion for understanding workplace dynamics. After spending a year working in Human Resources at MU, which provided her with practical insight and applied relevance to the field, she is currently a graduate student at Bowling Green State University pursuing a PhD in Industrial-Organizational Psychology. She received a Presidential Graduate Scholar Fellowship for her dedication to enhancing belonging and access at BGSU. Her research interests focus on organizational culture, employee well-being and other areas that bridge both theoretical inquiry and real-world application. Her academic and professional journey has taught her the impact of everyday decisions on personal and professional well-being, and thus why the value of learning to say "yes" – and "no" – is so important.

Ongoing Art Exhibit

Gallery G – Jo Young Switzer Center

Link Gallery – Winger

9:00 – 3:00 p.m.

Senior Art Exhibit

Cami Brown

Major(s): Psychology, Pre-Art Therapy – Class of 2025

Patricia French

Major(s): Art, Digital Media Arts – Class of 2025

Eamin Lynch

Major(s): Studio Arts, Exercise Science with Clinical Rehabilitation Focus – Class of 2025

Ryce Noragon

Major(s): Community Arts Organization, Digital Media Arts – Class of 2025

Faculty Mentor: Jeffrey Diesburg

Oral Presentations: Session I

9:10 – 9:30 a.m.

Analyzing Water Quality and the Effects of Concrete Channelization in an Urbanized Watershed in East Austin, Texas

Cunningham Academic Center, Room 146

Lucy Cooper

Major(s): Environmental Studies, Spanish – Class of 2025

Faculty Mentor: Dr. Kyle Watson

Rehab the Womanist Heroine: A Biblical Model for Womanist Values

Cunningham Academic Center, Room 149

Miriam Erbaugh

Major(s): Peace Studies, Political Science, Philosophy and Religious Studies – Class of 2026

Faculty Mentor: Dr. Kate Eisenbise

Cryptography

Cunningham Academic Center, Room 234

Alexander Hamilton

Major(s): Software Engineering – Class of 2027

Jaykwan Guerrero

Major(s): Applied Math Secondary Education – Class of 2027

Clay Stults

Major(s): Software Engineering – Class of 2027

Faculty Mentor: Dr. Timothy Brauch

Oral Presentations: Session I

9:40 – 10:00 a.m.

Crops and Community at Jubilee: A Case Study in Cultivation

Cunningham Academic Center, Room 146

Colleen Caylor

Major(s): Environmental Studies, Biology, Peace Studies – Class of 2025

Faculty Mentor: Dr. Katharine Gray Brown

Creating Customized and Culturally Competent Health Education Resources for Rural Communities in Shipshewana, Indiana, and Baja Verapaz, Guatemala

Cunningham Academic Center, Room 149

Kora Beasley

Major(s): Population Health, Peace Studies – Class of 2025

Faculty Mentor: Dr. Jeffrey Osborne

Temporal and Spatial Wound Signaling in Soybean

Cunningham Academic Center, Room 234

Zach Hood

Major(s): Biology-Chemistry, Chemistry – Class of 2026

Faculty Mentor: Dr. Jennifer Robison

Oral Presentations: Session II

12:20 – 12:40 p.m.

Monitoring the Eel River for Agricultural Runoff

Cunningham Academic Center, Room 146

Kaitlyn Carr

Major(s): Biology-Chemistry – Class of 2025

Faculty Mentor: Dr. Jennifer Robison

Experiencing History of the Mediterranean Region

Cunningham Academic Center, Room 149

Lucy Cooper

Major(s): Environmental Studies – Class of 2025

Faculty Mentor: Dr. Carlos Arturo Yañez

Analysis of War and Peace Tutorial

Cunningham Academic Center, Room 234

Valerie Lopez

Major(s): Environmental Studies, Peace Studies – Class of 2025

Andrew Kreps

Major(s): Environmental Studies, Peace Studies – Class of 2025

Faculty Mentor: Dr. Anuj Gurung

Oral Presentations: Session II

12:50 – 1:10 p.m.

Impacts of Microplastics on the Algal-Cnidaria Symbiosis

Cunningham Academic Center, Room 146

Julianne Gosnell

Major(s): Biology – Class of 2025

Faculty Mentor: Dr. Jennifer Robison

We The People

Cunningham Academic Center, Room 149

Elaina Halferty

Major(s): History, Educational Studies, Psychology – Class of 2025

Faculty Mentor: Dr. Uma Ganesan

Research Posters

Speicher/Lahman Room, Jo Young Switzer Center

Session 1: 10:15 – 11:15 a.m.

and

Session 2: 1:20 – 2:20 p.m.

1. Screen Usage in Children and Parental Ideologies

Carmen Ramirez

Major(s): Psychology, Criminology – Class of 2026

Eli Childress

Major(s): Psychology & Religious Culture, Peace Studies – Class of 2027

Faculty Mentor: Dr. Marcie Coulter-Kern

2. Student Perspective: Employable Skills

Hannah Marie Bailey

Major(s): Psychology with Concentration in Cognitive Neuroscience and Industrial Organization – Class of 2026

Avery Stockwell

Major(s): Psychology with Concentration in Cognitive Neuroscience, Psychology and Religious Culture – Class of 2026

Faculty Mentor: Dr. Russell Coulter-Kern

3. Exploring the Use of The Disney Approach as a Model of Customer Service within the College Admissions Office

Penelope Eash

Major(s): Criminology, Psychology with Concentration in Cognitive Neuroscience – Class of 2026

Erin Farmwald

Major(s): Psychology – Class of 2026

Madalynn Mercer

Major(s): Psychology – Class of 2026

Faculty Mentor: Dr. Russell Coulter-Kern

4. Mental Health in a Correctional Facility: The Insight to Factors Affecting Employees and Positions

Chloe Patton

Major(s): Psychology, Criminology – Class of 2025

Faculty Mentor: Dr. Jared Friesen

5. How Social Media Affects the Romantic Relationships of College Students

Christina Morrow

Major(s): Psychology – Class of 2027

Megan Lewis

Major(s): Criminology, Psychology – Class of 2027

Faculty Mentor: Dr. Marcie Coulter-Kern

6. Psychological Safety's Presence in Culturally Different Groups: An Effective Working Group Across Different Backgrounds

Adam Bubelenyi

Major(s): Psychology – Class of 2025

Faculty Mentor: Dr. Mark McCoy

7. How does Parental Mental Health Affect Children as Adults

Makayla Scott

Major(s): Psychology with Concentration in Cognitive Neuroscience – Class of 2027

Aidan Hopman

Major(s): Psychology – Class of 2027

Faculty Mentor: Dr. Mark McCoy

8. Positive and Negative Mate-Retention Tactics in College Relationships

Avery Kruger

Major(s): Psychology & Religious Culture – Class of 2027

Cami Brown

Major(s): Psychology, Pre-Art Therapy – Class of 2025

Faculty Mentor: Dr. Mark McCoy

9. The Impact of Eating Habits on the Mental Health of College Students

Alexia Goodman

Major(s): Psychology with Concentration in Cognitive Neuroscience – Class of 2026

Jessica Stephenson

Major(s): Psychology with Concentrations in Industrial Organization and Cognitive Neuroscience – Class of 2025

Rylee Stephany

Major(s): Psychology and Religious Studies – Class of 2026

Riley Leverington

Major(s): Psychology – Class of 2026

Faculty Mentor: Dr. Mark McCoy

10. Changing Students' Perspectives of Core Curriculum Through the Use of Emplorable Skills and Transparent Course Design

Audbriana Turnbow

Major(s): Psychology – Class of 2025

Alexandra Oden

Major(s): Psychology – Class of 2025

Cameron Hovey

Major(s): Psychology – Class of 2025

Faculty Mentor: Dr. Russell Coulter-Kern

11. Reliability and Validity of Hand-held Dynamometry Using Three Standard Rater Test Positions

Amanda Maninga

Major(s): Doctor of Physical Therapy – Class of 2026

Natalie Bussie

Major(s): Doctor of Physical Therapy – Class of 2026

Emily Novak

Major(s): Doctor of Physical Therapy – Class of 2026

Chance Anderson

Major(s): Doctor of Physical Therapy – Class of 2026

Rose Hoskins

Major(s): Doctor of Physical Therapy – Class of 2026

Faculty Mentor: Dr. Frank Aerts, Holly Sheets

12. The First Great Migration and its Implication for the State of Indiana

Jacob Caudill

Major(s): History – Class of 2025

Faculty Mentor: Dr. Uma Ganesan

13. Heavy Metals in Eyeshadow

Iris Lory

Major(s): Chemistry, Biology-Chemistry – Class of 2025

Margaret Slover

Major(s): Chemistry – Class of 2025

Faculty Mentor: Dr. Mark Bryant

14. Diels-Alder Hetero-Cycloaddition to Synthesize Functional Dense Small Molecules as Potential Antibiotics

Avin DeMaso

Major(s): Biology-Chemistry – Class of 2025

Eve Holl

Major(s): Biology-Chemistry – Class of 2025

Faculty Mentor: Dr. Kyle Watson

15. The Synthesis of Heteroatom-Activated Sulfa Analogs

Aiden Richardson

Major(s): Biology-Chemistry – Class of 2025

Faculty Mentor: Dr. Kyle Watson

16. Hierarchy of Importance when Synthesizing Fluorescent Carbon Nanoparticles?

Caleb Simerman

Major(s): Chemistry – Class of 2025

Faculty Mentor: Dr. Kathryn Davis

17. The Biodegradation of Styrene Oligomers

Margaret Slover

Major(s): Chemistry – Class of 2025

Faculty Mentor: Dr. Jeffrey Osborne

18. Examining the Effects of Prenatal Essential Oil Exposure on Fetal Development in a Murine Model

Grace Papazoglou

Major(s): Biology-Chemistry – Class of 2025

Iris Lory

Major(s): Chemistry, Biology-Chemistry – Class of 2025

Faculty Mentor: Dr. Kyle Watson

19. Use of the Stabilization Method in Characterizing Metastable Anion States

Zachary Mangham

Major(s): Chemistry – Class of 2025

Faculty Mentor: Dr. Kathryn Davis

20. The Synthesis and Analysis of Styrene Fragments for Biodegradation Studies

Henry Blakley

Major(s): Chemistry – Class of 2027

Faculty Mentor: Dr. Kyle Watson

21. Heartworm Disease and Treatment in Domestic Dogs

Logan Davis

Major(s): Biology-Chemistry – Class of 2025

Faculty Mentor: Dr. Jennifer Robison

22. Genotyping SFR6-2 SFR6-3

Malaysia Miller

Major(s): Biology – Class of 2025

Peyton Addair

Major(s): Biology-Chemistry – Class of 2025

Faculty Mentor: Dr. Jennifer Robison

23. Swiftly Learning Translation with Friendship Bracelets

Sadie Barber

Major(s): Biology – Class of 2026

Faculty Mentor: Dr. Jennifer Robison

24. Investigating the Early Response of Jasmonic Acid-Induced Protein Expression in Soybean Leaves

Lizbet Perez

Major(s): Biology – Class of 2025

Faculty Mentor: Dr. Jennifer Robison

25. Identifying the Impact of Melatonin Application on Gene Expression of an Abiotic Stress Reporter Transgenic Soybean Line

Brynn Woolley

Major(s): Biology – Class of 2025

Faculty Mentor: Dr. Jennifer Robison

Keynote Speaker

Lahman Room, Jo Young Switzer Center

2:30 p.m.

RITA as a Potential Glioblastoma Prevention Drug: Efficacy and Mechanism in Relation to p53 Status

Emily Burdick

Major(s): Biology-Chemistry – Class of 2025

Faculty Mentor: Dr. Diane Calinski

2025 Student Research Symposium Committee

Dr. Jennifer Robison, Associate Professor of Biology, Chair

Dr. Dennis Brown, Professor of Pharmaceutical and Graduate Life Sciences

Dr. Katharine Ings, Professor of English

Dr. Sam Rohr, Associate Professor of Business

Dr. Jacob Mertens, Assistant Professor of Communication Studies

Dr. Jeffrey Osborne, Professor of Chemistry

Traci Garcia, Administrative Assistant representing Academic Affairs

Megan Geary, Assistant Director of Student Life

Our sincere thanks to all the people who worked to make the 2025 Manchester University Student 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.

