

2017 Summer Research Symposium

Session I: Wednesday, October 18, 2017 – 12:40-2:00 p.m.

Session II: Wednesday, November 15, 2017 – 12:40-2:00 p.m.

Carver Atrium and Jordan Lecture Hall

Simpson students who conducted summer research will present their findings.

2017 Summer Research Symposium, Session II, November 15th

On-Campus Research Projects

12:45 P.M Jordan Lecture Hall

“Religious Literacy Education in Des Moines Area Public Schools”

Author: Maddy Kersten

Program: SUSI Grant (Simpson College), advised by Dr. Maeve Callan

1:00

“Investigating Diagonal Knot Grid Diagrams”

Authors: Jack Arndt, Malia Jansen and Payton McBurney

Program: Dr. Albert H and Greta A Bryan Summer Research Program in Mathematics, Simpson College

1:15

“Mathematical Billiards and the Search for a Finite Number of Shapes”

Authors: Daniel Camacho, Addison Grant, Sara Lawson

Program: : Dr. Albert H and Greta A Bryan Summer Research Program in Mathematics, Simpson College

1:30

“The Effects of Surrounding Land Use on Water Quality and Biodiversity in Lentic Aquatic Ecosystems”

Authors: Ian McKenzie Cade Millikin, Matt Turnley, and Molly Fisher

Program: Simpson College Ecological Research

1:45

“Palmer Project”

Authors: Jacob Bruns, Geoff Converse, Leslie Decker, Marisa Deforest,
Drew Roen, Maggie Long, and Zoe Muehleip
Program: Palmer Research Project (Pauley and Clint Meyer)

Off-Campus Research Projects

1:00 P.M C.S. 231

“Natural Language Processing and Insurance Claims”

Author: Kristina Smith

Program: Data Scientist intern in the Strategic Analytics department of EMC Insurance in Des Moines.

1:15

“A Prototype for Real-Time RFI Mitigation for Single-Dish Radio Telescopes”

Author: Nick Joslyn

Program: National Radio Astronomy Observatory NSF REU Research conducted at the Green Bank Observatory

1:30

*“Novel Antivirulence Molecules That Inhibit Type III Secretion System Activity in *Pseudomonas aeruginosa*”*

Author: Carley Irlimeier

Program: REU in Microbiology at University of Iowa

FUTURE Program in Biomedicine at University of Iowa

1:45

“Study of the density, distribution, and diversity of the tardigrades in the H.J. Andrews Experimental forest canopies in Oregon”

Author: Lindsay Mahaney

Program: REU at Baker University called Tardigrades in the Canopies.

Session I:

Wednesday, October 18, 2017 – 12:40-2:00 p.m.

Carver Atrium, Poster Session

*“Genetic Analysis of the *cosB* DNA Binding Site for TerS in Phage N15”*

Authors: Blake Brown, Nicole Vahanian, Jean Sippy, and Michael Feiss
Program: University of Iowa Microbiology REU

“*Trichomonas vaginalis* UDP-Glucose Pyrophosphorylase: An Important Enzyme During Glycogenesis”

Author: Galen Gist

Program: Des Moines University

“Herpes Simplex Virus 1 inhibition by Co-Administration of EGCG and the Telomerase Inhibitor MST-312”

Author: Kam Hartung

Program: Des Moines University

“TRIP13: A Novel Gene in Multiple Myeloma Tumorigenesis and Progression”

Author: Matt Hayden

Program: Summer Undergraduate MSTP Research (SUMR) program at the University of Iowa

“Novel Antivirulence Molecules That Inhibit Type III Secretion System Activity in *Pseudomonas aeruginosa*”

Author: Carley Irlimeier

Program: REU in Microbiology at University of Iowa

FUTURE Program in Biomedicine at University of Iowa

“Solvent dependent fluorescence study in topographically different MOFs”

Author: Andrea VanWyk

Program: “Interdisciplinary Materials Research, Research Experience for Undergraduates” at Southern Illinois University at Carbondale

Authors: Ben Christensen, Genevieve Block, and Manoj Rai

Program: Carver Bridge Mammalogy Behavior Project