



Office of Research and Sponsored Programs
Undergraduate Research Center

Summer Research Celebration

Friday, July 26, 2019
Science Building Atrium

<u>Poster</u>	<u>Authors & Mentors</u>	<u>Department/ Program</u>	<u>Title</u>
1	Colleen A Olson Austin S. Wassenberg Alex R. Kaszynski <i>Dr. William M. Robertson</i>	Physics/Astronomy	Speech Compression
2	Austin S. Wassenberg Colleen A. Olson Alex R. Kaszynski <i>Dr. William M. Robertson</i>	Physics/Astronomy	Acoustic Filtering With Ring Resonator
3	Alexander R Kaszynski Colleen A. Olsen Austin S. Wassenberg <i>Dr. William M. Robertson</i>	Physics/Astronomy	Biosensor Interface Development
4	Sara A. Moore Rebekkah M. Riley <i>Dr. John DuBois</i>	Biology	Somatic Embryogenesis from Stamen and Ovary Callus Tissues in <i>Vitis aestivalis</i> 'Norton/Cynthiana'
5	Lanjing Bao Logan Rose <i>Dr. Wandi Ding</i>	Mathematical Sciences	Mathematical Modeling and Optimal Control for Malaria Transmission Using Sterile Mosquitoes Technique
6	Logan D. Rose Lanjing Bao <i>Dr. Wandi Ding</i>	Mathematical Sciences	Mathematical Modeling and Optimal Control for Malaria Transmission Using Sterile Mosquitoes Technique
7	Ekaterina Valuiskaya <i>Dr. Daniel J. Smith</i>	Political Economy Research Institute	Corporate Social Responsibility in Business-to- Business and Business-to-Consumer Companies: Case Studies

8	Rachel A Eccles <i>Dr. Daniel J. Smith</i>	Economics and Finance	The Human Papillomavirus Vaccination Barriers and Initiatives
9	Thuy-Linh T Tran <i>Dr. Beng G. Ooi</i>	Chemistry	Investigating the Dye Components in Color-Run Powders
10	Lucas W Remedios <i>Dr. Joshua L. Phillips</i>	Computer Science	Enabling Multi-Task Learning in Partially- and Non-observable Environments with Keras
11	Avraz Anwar <i>Dr. Norma K. Dunlap</i>	Chemistry	Beta-lactone Analogs of Belactosin A
12	Ashton Reece Kylie Moe Matt Grisnik <i>Dr. Donald M. Walker</i>	Biology	The Endosymbiotic Bacterial Community of the Causative Agent of White Nose Syndrome, (<i>Pseudogymnoascus destructans</i>) of Bats
13	Kylie C Bowe Ashton Reece <i>Dr. Donald M. Walker</i>	Biology	The Endosymbiotic Bacterial Community of the Causative Agent of White Nose Syndrome, (<i>Pseudogymnoascus destructans</i>) of Bats
14	Jared G Frazier Virginia L. Benefield <i>Dr. Mengliang Zhang</i>	Chemistry	Fast Screening of Explosives by Direct Analysis in Real Time Mass Spectrometry
15	Miles D. Matchinske <i>Dr. Sarah E. Bergemann</i>	Biology	Heritability of Bioluminescence Intensity in Fungus <i>Armillaria mellea</i>
16	Joseph P. Gulizia <i>Dr. Kevin M. Downs</i>	Agriculture	Comparison of Dietary Kudzu Leaf Meal and Alfalfa Meal Supplementation on Broiler (<i>Gallus gallus domesticus</i>) Performance and Carcass Characteristics
17	Rachel Bailey Kallie Attig <i>Dr. Paul Kline</i> <i>Dr. John DuBois</i>	Biology	The Effect of Elicitor Stimulation on Industrial Hemp
18	Wesley A Riley Gabriella S. Morin Jiwoo Park <i>Dr. David E. Nelson</i>	Biology	Determining How Disease-associated Mutations Affect the Dynamics of Mitochondrial Recruitment and Loss of the Mitophagy Regulator, Parkin
19	Jiwoo Park Jonathan L. Bowling <i>Dr. David E. Nelson</i>	Biology	Producing a Blue Fluorescent Mitochondrial Marker for Live Cell Imaging of Mitochondrial Dynamics

20	Radina I Porashka Sauleen Shamdeen Nathan Smith Mary Parsley Emerniece Cooper <i>Dr. Anthony Farone</i>	Biology	Lambornella clarki
21	Emerniece Cooper Mary E. Parsley Radina Farone Sauleen Shamdeen Nathan L. Smith <i>Dr. Mary Farone</i> <i>Dr. Sharon G. Berk</i> <i>Dr. Anthony Farone</i>	Biology	Molecular Identification of Protozoa Recovered from Mosquito Habitats
22	Robyn M Sessler Kaitlyn E. Berry <i>Dr. Emily A. Farris</i> <i>Dr. Timothy N. Odegard</i>	Psychology	A Resting-State EEG Investigation of Reading Ability
23	Kaitlyn E Berry Robyn Sessler <i>Dr. Emily A. Farris</i> <i>Dr. Timothy N. Odegard</i>	Psychology	Examining Letter-Speech Sound Relationships Through EEG
24	Ephraim Kim <i>Dr. Joshua L. Phillips</i>	Computer Science	Grading Performance of Clustering Algorithms on Molecular Simulations of Proteins
25	Jeff S. Payne <i>Dr. Joshua L. Phillips</i>	Computer Science	Explorations of Hybrid Spectral/Subspace Clustering Methods
26	Nibraas Khan <i>Dr. Joshua L. Phillips</i>	Computer Science	Working Memory for Fully Autonomous Systems (Combined Model for Partially-observable and Non-observable Task Switching)
27	Holli L Kerns <i>Dr. Norma K. Dunlap</i>	Chemistry	Stereoselectivity in Cyclopropanation
28	Lindsey Elkins <i>Dr. Jeffrey D. Leblond</i>	Biology	Does the Presence of Eyespots Influence Plastid-Associated Galactolipid Composition in Dinoflagellates
29	Nicolas R. Kaszynski <i>Dr. Andrienne C. Friedli</i>	Chemistry	Taking a Magic Leap from Workstation to Headset: Visualizing Molecules in 3D
30	Mustapha Abdulmojeed Tegan E. Schafer <i>Dr. Anna M. Pietrzak</i> <i>Dr. Piotr Kaszynski</i> <i>Dr. Andrienne C. Friedli</i>	Chemistry	Synthesis and Physical Properties of a Series of [closo-B10H8 - 1-Pyridinium-10-Nu] Anions

31	Darshit B. Patel Gabriel T. Gwirtsman <i>Dr. Andrienne C. Friedli</i>	Chemistry	Either Ether? Trends in Absorption and Emission of Donor-Acceptor Dyes
32	Aric Moilanen <i>Dr. Suman Neupane</i>	Physics/Astronomy	Synthesis and Characterization of Al ₂ O ₃ Nanopowder Reinforced with Carbon Nanotubes
33	Lauren Chandler-Holtz Amirhossein Samiepour <i>John Ford</i> <i>Dr. Rachel Leander</i>	Mathematical Sciences	A Comparison of Simulation-based Approximate Likelihood Parameter Estimation Methods

Thank you for attending the 2019 Summer Research Celebration!

Undergraduate Research Center (URC)

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 Program Manager: Dr. Jamie Burriss
 Coordinator: Wendi Watts
www.mtsu.edu/urc
 Office of Research and Sponsored Programs
 Sam Ingram Building, Garden Level

The MTSU Undergraduate Research Center (URC) was created in 2004 to promote mentored research at the undergraduate level and provide university support for undergraduate students and the faculty members who mentor them in scholarly and creative activities. This includes providing information and financial support through grants. Mentored research strengthens students' content knowledge, research skills, and soft skills that employers and graduate schools value.

In addition to funding student research through our Undergraduate Research Experience and Creative Activity (URECA) grants, the URC hosts several events each year that give MTSU students an opportunity to showcase their research. These events include the Summer Research Celebration, the Fall Undergraduate Research Open House, Posters at the Capitol, and Scholars Week. We hope you will check out these events and join us to experience the benefits of mentored research firsthand.

Save the Dates!

Thursday, September 5, 2019 – Fall URECA Deadline
 Thursday, October 3, 2018 – Fall Undergraduate Research Open House – SCI Atrium, 11-1 p.m.
 Thursday, January 30, 2020 – Spring URECA Deadline
 Thursday, April 9, 2020 – Summer URECA Deadline
 April 20-24, 2019 (tentative) – Scholars Week 2020