



The following 25 graduate students participated in the 2019 KU 3MT Competition, presenting their research in the Heats Round on February 18, 2019, in Forum A and Forum B of the Burge Union. Below is their name, their degree and graduate program, and their research title.

Sirwan Alimoradi

Doctoral Student in Environmental Engineering

“Hydrothermal Liquefaction of Biomass: Nutrient and Energy Recovery”

Isaac Allred

Doctoral Student in Geology

“Inverse Modeling/Mapping 315 million Year Old River Systems With U-Pb Ages From Deepwater Sandstone Deposits in Arkansas”

Emily Arsenault

Doctoral Student in Ecology and Evolutionary Biology

“Forming the Foundation: How Landscapes Shape River Food Chains”

Sayantani Basu

Doctoral Student in Chemical Engineering

“Nanoengineered DNA Based Injectable Hydrogels as Sustained Drug Delivery Platform for Cranial Defect Repair”

Jordan Borrell

Doctoral Student in Bioengineering

“Rewiring the Injured Spinal Cord - Is the Bionic Person a Reality?”

Georgios Chrysikopoulos

Doctoral Student in Civil Engineering

“Development of a Driver Behavior Model for Manual and Automated Control Considering Driver Cognition”

Kelsey Fortin

Doctoral Student in Health Education and Exercise Psychology

“Hidden Hunger - Understanding Food Insecurity Among College Students”

Atefeh Hosseini

Doctoral Student in Environmental Science

“The Impact of Vegetation Dynamics on Surface Fluxes in the Noah-MP Land Surface Model”

Kait Howard

Master's Student in Bioengineering

"You Can't Be Replaced, But Your Knee Can!"

David Ingham

Doctoral Student in Molecular, Cellular, and Developmental Biology

"Untangling Alzheimer's Disease: One Strain At a Time"

Shivani J.M

Doctoral Student in Molecular, Cellular, and Developmental Biology

"ConFUSION in Cancer - A Real Problem?"

Shravan Kaundinya

Doctoral Student in Electrical Engineering

"Monitoring Water Content in Soil Using Radar"

Michelle Keller

Doctoral Student in Journalism and Mass Communications

"Exploring the Role of Photovoice on Self-Esteem Levels of Women Living in an Urban Residential Substance Use Disorder (SUD) Treatment Community"

Farhad Mahmood

Doctoral Student in Electrical Engineering

"Modeling and Analysis of Energy Efficiency in Wireless Handset Transceiver Systems"

Triveni Mudaliar

Doctoral Student in Civil Engineering

"Structural Performance of Optimized Shear Walls"

Victoria Perko

Doctoral Student in Clinical Psychology

"Application of Network Analysis to Investigate Sex Differences in Interactive Systems of Eating-Disorder Psychopathology"

Suman Rath

Doctoral Student in Special Education

"Using the Power of Sound in Transforming Environments For Students With Disabilities"

Aaron Rudeen

Doctoral Student in Molecular, Cellular, and Developmental Biology

"Gut Gone Wild"

Todd Schmidt

Doctoral Student in Political Science

"Silent Coup of the Guardians: Military Influence on National Security"

Crystal Shi

Doctoral Student in Chemical Engineering

“Nanocrystals Pave the Way For a New Use of Sugar”

Sanjana Sundararajan

Doctoral Student in Molecular, Cellular, and Developmental Biology

“Because Small Things Do Go a Long Way!”

Amilee Turner

Doctoral Student in Political Science

“Bridging the Micro-Macro Divides: Reassessment of the Dominant Models Explaining Political Violence”

Gang Yang

Doctoral Student in Petroleum Engineering

“Phase Behavior in Shale Hydrocarbon Reservoirs”

Westley Youngren

Master's Student in Clinical Psychology

“Triggers of Trauma Related Nightmares”

Peymon Zereszki

Doctoral Student in Physics

“The Future of Electronic Technology”