S&T announces Undergraduate Research Conference winners

ROLLA, Mo. -- The winners of the 14th annual Undergraduate Research Conference at Missouri University of Science and Technology have been announced. The conference, which was held on April 17 on the S&T campus, featured oral and poster exhibitions that represented work from students in nearly every major at Missouri S&T. Winners were awarded a cash prize of $500. Second- and third-place finishers received $250 and $100, respectively.

During the conference, over 100 Missouri S&T students presented their current research projects to the public. For the full list of all the students who participated and their research abstracts, visit academicsupport.mst.edu/experientiallearning/ugrc.

The following students won poster presentation awards.

Arts and humanities poster session:
First place – Arthur Schneider, a junior in history from Hermann, Missouri, for research titled “Mapping Slave Uprisings Across the Eighteenth-Century British Atlantic.” The research advisor is Dr. Justin Pope, assistant professor of history and political science.
Second place – Randy Greeves, junior in history from Oologah, Oklahoma, for research titled “American Friends Service Committee In France During World War II.” The research advisor is Dr. Shannon Fogg, chair and professor of history and political science.
Third place – Emily Beahm, a sophomore in biological sciences from Kansas City, Missouri, for research titled “It’s not easy being green: The presence of greenwashing in commercial advertisements.” The research advisor is Dr. Terry Robertson, associate teaching professor of arts, languages, and philosophy.

Engineering poster session:
First place – Dalal Abduljaleel, a senior in biological sciences from Rolla, Missouri, for research titled “Corneal Abrasion Project.” The research advisors are Dr. Delbert Day, Curators’ Distinguished Professor emeritus of materials science and engineering, and Richard Watters, research lab supervisor for teh Center for Biomedical Research.
Second place – Elizabeth Matejka, a senior in chemical engineering from St. Charles, Missouri, for research titled “Spreadsheet-Based Simulator of a Flash Drum.” The research advisor is Dr. Joontaek Park, assistant professor of chemical and biochemical engineering.
Third place – Jonathan Kuchem, a senior in civil engineering from Augusta, Missouri, for research titled “Mechanical Properties of Steel Fiber Reinforced Concrete Made With Recycled Materials.” The research advisor is Dr. Nicolas Libre, assistant teaching professor of civil, architectural and environmental engineering.

Research poster session:
First place – Kaelyn Kacirek, a junior in engineering management from Kansas City, Missouri, for research titled “The Famous Melodies Task: Design, development, and use in studies of category knowledge.” The research advisor is Dr. Amy Belfi, assistant professor of psychological science.
Sciences poster session:

First place – Madeline Hines, senior in chemistry from Rolla, Missouri, for research titled “Regulation of Actomyosin Ring Formation during Cytokinesis by Iqg1 and Phosphorylation.” The research advisor is Dr. Katie Shannon, associate teaching professor of biological sciences.

Second place – Heather Hingst, a junior in geology and geophysics from Hermann, Missouri, for research titled “A preliminary study of The Great Valley Microsite: collection and analysis of a microvertebrate fossil assemblage in the Hell Creek Formation of Eastern Montana.” The research advisor is Dr. Francisca Oboh-Ikuenobe, professor of geology and geophysics.

Third place – Osvaldino Contreiras, a senior in geology and geophysics from Luanda, Angola, for research titled “The Origin of Pennsylvanian Magnetic Shale from the Viper Pit Mine, Illinois.” The research advisors are Dr. Marek Locmelis, assistant professor; Dr. David Wronkiewicz, associate professor; and Dr. Kelly Liu, professor; all in geosciences and geological and petroleum engineering.

Social science poster session:

First place – Alexandra Emily, a senior in applied mathematics and economics from Hillsboro, Missouri, for research titled “Bitcoin: A Study in Price Development and Volatility.” The research advisor is Dr. Ana Ichim, assistant professor of economics.

First place – Kaelyn Kacirek, a junior in engineering management from Kansas City, Missouri, for research titled “The Famous Melodies Task: Design, development, and use in studies of category knowledge.” The research advisor is Dr. Amy Belfi, assistant professor of psychological science.

Second place – Sara Johnson, a sophomore in psychological science from St. Louis, for research titled “Project Title Predictors of Freshmen Engineering Students’ Report of Cheating.” The research advisor is Dr. Amber Henslee, associate professor of psychological science.

Third place – Cooper Broman, a sophomore in information science and technology from Festus, Missouri, for research titled “The Impact of Monetary Gains and Losses on Cybersecurity Behavior.” The research advisor is Dr. Fiona Nah, professor of business and information technology.

The following students won oral presentation awards.

Arts and humanities oral presentation:

First place – Donald Morard, a junior in history from Fulton, Missouri, for research titled “The Russian Revolution: A 100 years of Historiography.” The research advisor is Dr. Shannon Fogg, chair and professor of history and political science.

Engineering oral presentation:

First place – Ryan Honerkamp, a senior in civil engineering from Farmington, Missouri, for research titled “Role of a Laboratory Tornado Simulator in Achieving Tornado-ready Communities.” The research advisor is Dr. Grace Yan, assistant professor of civil, architectural and environmental engineering.

Second place – Samuel Fayad, a senior in mechanical engineering from Mexico, Missouri, for research titled “DMD-Enabled Active Spatiotemporal Thermography.” The research advisor is Dr. Edward Kinzel, assistant professor of mechanical and aerospace engineering.
Third place – Connor Griffin, a junior in chemical engineering from Robinson, Illinois, for research to develop an inorganic structure into a greenhouse gas adsorbent. The research advisor is Dr. Ali Rownaghi, assistant research professor of chemical and biochemical engineering.

Sciences oral presentation:

First place – Cholaphan Deeleepojananan, a senior in chemistry from Nakhon Pathom, Thailand, for research titled “Salt-Assisted Ultrasonic Deaggregation of Nanodiamond.” The research advisor is Dr. Vadym Mochalin, associate professor of chemistry.

Second place – Samantha Greaney, a senior in biological sciences from Wildwood, Missouri; and Laura Murray, a senior in biological sciences from Platte City, Missouri; for research titled “The Use of Bioactive Glass in the Treatment and Prevention of Sexually Transmitted Infections.” The research advisor is Dr. Julie Semon, assistant professor of biological sciences.

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