

## 2020 Summer STEM Academy @UCA June 15 - 19

The 2020 Summer STEM Academy @ UCA is a one-week research immersion experience for **students entering grades 9 - 11**. In three complementary courses(1) microbiology; (2) experimental design and empirical modeling; and (3) data analysis & visualization; students will design, implement, and analyze data from their own experiments focused on the identification of novel antibacterial substances. The program is funded by AEGIS grant from the Arkansas Department of Education and is organized by the Department of Mathematics and the STEM Institute at UCA.



#### Fee: NO COST (supported by ADE grant) Application Deadline May 15, 2020

For more information contact: Dr. Ramesh Garimella, Chair Department of Mathematics Phone: 501-450-3147 Email: rameshg@uca.edu **To Apply: http://uca.edu/go/558483** 



### COURSES

#### **Microbiology:**

Students will work in small groups to design their own experiments focused on the identification of novel antibacterial substances, with guidance from Dr. Krista Peppers, Biology faculty.

# Experimental Design and Empirical Modeling:

Be introduced to statistical modeling and utilize those tools to develop and analyze your own experiments with Dr. Todd Abel, Mathematics faculty.

#### **Data Analysis & Visualization:**

Develop computer programming skills and tools to analyze and visualize data with Dr. Mark Doderer, Computer Science faculty.

### DAILY SCHEDULE

8:45 - 9:15	Morning Meeting
9:15 - 10:45	Microbiology
11:00 - 12:30	Experimental Design and
	Empircial Modeling
12:30 - 1:15	Lunch provided by Academy
1:30 - 3:00	Data Analysis & Visualization

Presentations Friday, June 19 3:00-4:00