

**Research Project:** Rapid Detection Technologies (Biosensors) for Food Pathogen Detection  
**Faculty Mentor:** Prof. Ramaraja Ramasamy, College of Engineering ([rama@uga.edu](mailto:rama@uga.edu))  
**Area of Expertise:** Chemical engineering, nanotechnology, material science, microbiology.  
**Student Background:** Chemistry, Biochemistry, Food Science, Microbiology, Engineering Fabrication.  
**Laboratory Website:** [www.ramasamy.uga.edu](http://www.ramasamy.uga.edu)

Dr. Ramasamy is looking for REEU students with background and interest in chemistry, biochemistry, microbiology, food science, or biological/chemical engineering to work on a summer project that will focus on developing new electrochemical biosensor for the detection of microbial food pathogens such as *Listeria*. REEU students will work with graduate students in Dr. Ramasamy's Nano Electrochemistry Laboratory in experimental research. Students will receive interdisciplinary exposure to nano and biotechnology related research areas and will have the opportunity to for professional development on the UGA campus.



**Research Project:** Development of Cellulose Based Coatings for Corrosion and Microbial Resistance  
**Faculty Mentor:** Prof. Ramaraja Ramasamy, College of Engineering ([rama@uga.edu](mailto:rama@uga.edu))  
**Area of Expertise:** Chemical engineering, nanotechnology, material science, microbiology.  
**Student Background:** Chemistry, Biochemistry, Food Science, Microbiology, Engineering Fabrication.  
**Laboratory Website:** [www.ramasamy.uga.edu](http://www.ramasamy.uga.edu)

Dr. Ramasamy is looking for REEU students with background and interest in chemistry, biochemistry, microbiology, food science, or biological/chemical engineering to work on a summer project that will focus on developing new cellulose based nanocomposite polymeric materials to be used as coatings for antimicrobial activity and corrosion resistance when used on metallic surfaces. REEU students will work with graduate students in Dr. Ramasamy's Nano Electrochemistry Laboratory in experimental research. Students will receive interdisciplinary exposure to nano and biotechnology related research areas and will have the opportunity to for professional development on the UGA campus.

