

Research Project: Improved Cacao Fermentation for Ultra-Premium Chocolate
Faculty Mentor: Dr. Reyes, College of Agricultural and Environmental Sciences (jireyes@uga.edu)
Area of Expertise: Food science, food engineering, chemical engineering, enzymes, biosensors
Student Background: Food science, chemistry, biochemistry, microbiology.
Faculty Website: <https://foodscience.caes.uga.edu/people/faculty/jose-reyes.html>

Dr. Reyes is looking for REEU students with background and interest in food science, biological/chemical engineering, or chemistry to work on a summer project that will focus on developing small scale cacao fermenters that can be used by small holders in developing countries. REEU students will work directly with Dr. Reyes. Undergraduate students will also participate in weekly research meetings with graduate students and will be exposed to other areas of research in Dr. Reyes' laboratory including stabilization of enzymes under high hydrostatic pressure, development of novel naturally flavored chocolate beverages, biofilm formation and dynamics etc. Students will have the opportunity to visit many of UGA research facilities and to network with other researchers on campus for professional development.



Research Project: Stabilization of Enzymes at High Hydrostatic Pressure
Faculty Mentor: Dr. Reyes, College of Agricultural and Environmental Sciences (jireyes@uga.edu)
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Dr. Reyes is looking for REEU students with background and interest in biological/chemical engineering, food science, or chemistry to work on a summer project that will focus on characterizing the stability of enzymes relevant to food and agriculture. Dr. Reyes' laboratory is equipped with reactors that can reach up to 100,000 psi. REEU students will collaborate in on-going projects led by Dr. Reyes' graduate students. Participants will also participate in weekly research meetings with graduate students and will be exposed to other areas of research in Dr. Reyes' laboratory including electrochemical biosensors, cacao fermentation, development of novel naturally flavored chocolate beverages, biofilm formation, dynamics etc. Students will have the opportunity to visit many of UGA research facilities and to network with other researchers on campus for professional development.

