Goddard Research Lab

Area of research

Research in the Goddard Lab on Biomaterials and Biointerfaces in the Department of Food Science at Cornell University centers around materials chemistry and bioactivity for improving food safety and reducing food waste. Active research projects include development of active packaging materials, antimicrobial materials, nonfouling coatings, and biocatalytic materials.

For more information, please visit my website: blogs.cornell.edu/Goddard

Type of student we are looking for

We are actively seeking a new Ph.D. candidate to design, synthesize, and characterize the efficacy of polymeric biomaterials for improving food safety and quality. Specific research projects would be identified based on laboratory needs and student interests/background. Students with prior research experience in Food Chemistry, Materials Science, Polymer Chemistry or related fields are strongly encouraged to apply. Candidates are required to have English proficiency and excellent writing and communication skills, ability to conduct independent research in a collaborative environment, and a high degree of self-motivation.

Mentoring philosophy

My mentoring style varies based on individual student strengths and needs, but the ultimate goal is to provide opportunities such that upon graduation, students are exceptional scientists with expertise in their dissertation area as well as excellence in leadership, critical thinking skills, independence, and technical creativity. Our group has an established record of job placement (industry and academia), research awards, publication, and active participation in conferences.

Lab environment

We work hard to maintain a positive, collaborative, and friendly laboratory environment with excellent research productivity. Junior students get mentorship from the PI, the lab manager, and senior graduate students. Our laboratory facilities are fully equipped with state-of-the-art instrumentation in polymer synthesis and characterization with a fully equipped BSL2 microbiology laboratory. Students in the Goddard Lab have access to world class shared user facilities such as the Cornell Nanoscale Science & Technology Facility (CNF), NanoBioTechnology Center (NBTC), and the Cornell Center for Materials Research in order to conduct their dissertation work. The research group consists of M.P.S and Ph.D. graduate students, undergraduate researchers, postdoctoral researchers, a lab manager, and PI Goddard. We work closely with collaborators within and outside the Food Science department.