

Wallace H. Coulter Foundation Biomedical Engineering Seminar Series

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TOWARDS POINT OF SERVICE RAPID DIAGNOSTIC METHODS FOR BACTERIAL PATHOGENS

ABSTRACT: The importance of rapid diagnostic tools for point of care and point of service applications can't be understated in the post-pandemic world. While various methods are available for first level identification of pathogens for clinical applications, electrochemical biosensors provide some unique advantages with respect to cost, ease of use, rapid detection capability and low detection

limits. This seminar will focus on the development of electrochemical diagnostic methods for broad range of biomedical applications. The first type of sensor is a DNA-based diagnostic method for detection of cancer biomarkers in clinically-relevant samples. The second type is a virus-based selective electrochemical detection of pathogenic bacterial cells in food and clinically-relevant sample matrices.



Through the generous support of the Wallace H. Coulter Foundation, the Department of Biomedical Engineering facilitates weekly lectures each year during academic terms. Experts in all areas of Biomedical Engineering are invited to provide a research seminar and to meet with faculty and students to discuss the latest developments and research in Biomedical Engineering.