

IFSH Seminar Series

Monday, September 26, 2016

10:30 – 11:30 AM

Room 100

W. Evan Chaney, PhD

Director, Customer Applications & Microbiology
Roka Bioscience, Inc.

Advances in Food Pathogen Detection: Increasing Assay Accuracy with Integrated Sample Preparation, Transcription Mediated Amplification, and Full Automation

Biosketch

Evan has been with Roka Bioscience since 2013 where he has held the positions of Manager of Customer Applications, Sr. Manager of Scientific Affairs and in his current role as Director of Customer Applications and Microbiology. In his current role, Evan manages a department and team focused on the application and validation of Roka's pathogen detection technology across sample matrices. He additionally manages external research collaborations with academic, governmental or industry third party partners and serves as a technical participant within the company's product and technical support, sales, marketing and senior management functions. Prior to joining Roka in 2013, Evan completed his PhD in Animal Science with an emphasis in pre and post harvest food safety and microbiology at Texas Tech University. He also completed his MS in Food Science and BS in General Microbiology, also at TTU.

Abstract

This seminar will provide an introduction to the food pathogen detection technologies integrated into Roka Bioscience's Atlas® System. The Atlas technology has brought significant advances to the food industry's ability to detect pathogens by the incorporation of integrated sample preparation which utilizes molecular based target capture technology to clean up food samples prior to amplification and detection. After clean up, RNA based targets are detected via Transcription Mediated Amplification and Hybridization Protection Assay chemistries. All three of the molecular based technologies are fully automated on the Atlas System which improves assay accuracy by minimizing operator touch points, increasing sample and reagent traceability, and offering multiple levels of specificity. Real world comparative studies demonstrate the Atlas technology delivers improved accuracy particularly in challenging matrices (e.g. environmental samples, egg products, produce, and ground poultry). By employing the Atlas technology, either at their facility or through a third party lab provider, food processors are able to minimize risk and improve the resolution in their sampling and preventative control programs.