

Foodborne Disease Surveillance: Genomics, Metagenomics, and the Road Ahead

NATIONAL LABORATORY TRAINING NETWORK



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Advanced technology is changing the field of microbiology at an unprecedented rate, opening up opportunities and challenges for public health that were not imaginable a few years ago. In the area of foodborne disease surveillance, successive laboratory and epidemiology innovations during the last 20 years have increasingly helped to detect and solve distributed outbreaks caused by problems in the food supply that would not otherwise have been recognized. Will the real-time use of next generation sequencing (NGS) technology make it possible to detect more outbreaks more quickly and make them easier to solve? The U.S. Centers for Disease Control and Prevention, in collaboration with multiple U.S. and international agencies and all 50 U.S. states, initiated a nationwide real-time whole genome sequencing (WGS)-based surveillance project for *Listeria monocytogenes* in late 2013. Lessons learned will be presented, along with a description of the nationwide wgMLST-based infrastructure developed for PulseNet.

FREE WEBINAR

- Locate the course online under Live Webinars at www.cdc.gov/labtraining.
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CEUs:

The Centers for Disease Control and Prevention, Laboratory Training Team, is approved as a provider of continuing education programs in the clinical laboratory sciences by the ASCLS P.A.C.E.® Program.

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Objectives:

At the conclusion of this program, the participant will be able to:

- Describe the benefits of whole genome sequencing (WGS) for foodborne outbreak detection and investigation.
- Summarize the basics of the WGS infrastructure being rolled out to the states.

Target Audience:

This intermediate-level webinar will be of interest to public health laboratorians.

Special Needs

Course content is closed captioned where applicable and optimized for a screen reader.