



William J. Love



Post-doctoral Research Fellow

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Antimicrobial Resistance Epidemiology

Research emphasis:

Dr. Love's primary research interests are developing tools to support and improve clinical decision-making and antimicrobial stewardship. His focus is on developing methods to describe and study drug resistance co-occurrence in pathogenic bacteria. This information is critical for making informed therapeutic choices that will both slow the evolution of resistance and lead to successful clinical outcomes. He is also developing systems to rapidly return tailored results to clinicians in real-time.

Applications:

- Antimicrobial resistance
- Quantitative analysis
- Surveillance data

Research Strengths:

- Analytic programming
- Empirical graphical models
- Multivariate analysis of bacterial genetic and phenotypic data

Publications and Abstracts: (limit 4)

Love WJ, Zawack KA, Booth JG, Grohn YT, Lanzas C. "Markov Networks of Collateral Resistance: National Antimicrobial Resistance Monitoring System Surveillance results from Escherichia coli Isolates, 2004 – 2012." PLOS Computational Biology (Accepted awaiting publication, Oct 2016)

Love WJ, Lehenbauer TW, Van Eenennaam AL, Drake CM, Kass PH, Farver FB, Aly SS. "Sensitivity and specificity of on-farm scoring systems and nasal culture to detect bovine respiratory disease complex in preweaned dairy calves." J of Veterinary Diagnostics and Investigation. 28:119-28. Mar 2016.

Love WJ, Lehenbauer TW, Kass PH, Van Eenennaam AL, Aly SS. "Development of a novel clinical scoring system for on-farm diagnosis of bovine respiratory disease in pre-weaned dairy calves." PeerJ. 2:e238. Jan 2014