

Improving Surveillance for LaCrosse Encephalitis Virus and its Vectors – Becky Trout-Fryxell

- a) Primary vector – *Aedes triseriatus*
- b) Secondary vectors
 - 1) *Aedes albopictus*
 - 2) *Aedes japonicus*
- c) Looking for good surveillance sites
 - 1) Would cemeteries work?
<http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0122895>
 - 2) Ovitrap collected eggs of positive mosquitoes
 - 3) Results
 - (i) Collected all three species
 - (ii) Spatial clustering analysis
 - (a) No clustering of *Aedes japonicus*
 - (b) Positive mosquitoes were found near the point where the other two species clusters overlapped
- d) Looking for a better trap
 - 1) Urquhart et al, 2016, JAMCA
 - 2) Compared 5 trap types
 - (i) BG trap
 - (ii) CDC trap with dry ice
 - (iii) CDC trap with lure
 - (iv) Resting trap
 - (v) Ovitrap
- e) Viral testing (Urquhart Thesis – University of TN)
 - 1) RT-LAMP
 - (i) Visual results
 - (ii) Specific for LACv
 - 2) Currently checking field samples
- f) Summary
 - 1) CDC traps with BG lure
 - 2) Gravid traps
 - 3) Cemeteries for surveillance sites
 - 4) RT-LAMP for testing
 - 5) In progress – modeling populations