

*Wolbachia*, a Gram-negative bacterium that infects mosquitoes along with other arthropods, can suppress the spread of microfilaria through reducing the populations of mosquitoes that carry the heartworms. Historically, research has been conducted to use in the prevention of infections from parasites or viruses like Zika or yellow fever. It is important to understand ways of preventing the various infections from occurring not only by host prevention but through vector prevention or suppression. In the summer of 2018, a total of thirty-five adult female mosquitoes were collected in Oakwood, Georgia at the University of North Georgia in two locations between May 29, 2018 through August 10, 2018 to evaluate for microfilaria and *Wolbachia*. Following evaluation for microfilaria, DNA extraction from each mosquito was completed for polymerase chain reaction (PCR) testing to test for *Wolbachia* presence and absence. Data analysis is being continued at this time. Determining the presence of *Wolbachia* in our adult female samples could help us better determine ways to control mosquito populations to slow or halt the spread of ultimately fatal diseases, parasites, and viruses that are transmitted through adult female mosquitoes. Research conducted through PCR could lead to larger scale research projects sampling mosquitoes for this high-impact bacterium in the future.