

GAGE PYLES and JOSEPH HORZEMPA, Department of Natural Sciences and Mathematics, West Liberty University, West Liberty, WV. Utilizing the *Francisella tularensis* Live Vaccine Strain as a novel vaccine platform against the Ebola Virus.

*Francisella tularensis* and the Ebola Virus (EBOV) are classified by the Centers for Disease Control and Prevention as Category A select agents for their potential use in bioterrorism. The *F. tularensis* Live Vaccine Strain (LVS) has been shown to provide over 30 years of protective immunity against *F. tularensis*, while for EBOV there remains no clinically approved protective vaccine. Due to the immunogenic properties of LVS, we propose that LVS may be a promising vaccine platform, of which recombinant strains may be able to confer protection against both *F. tularensis* and other pathogenic microbes such as EBOV. To test this, a fusion protein consisting of the glycoprotein of EBOV (GP) and LpnA (an immunodominant outer-membrane lipoprotein of *F. tularensis*) has been created. This newly generated chimeric protein (LpnA-GP) will ultimately be expressed in LVS, and the efficacy of this strain as a vaccine against both pathogens will be determined.