

The Crystal Structure of *Francisella Tularensis* AcpA

Richard Felts^a, John Tanner^a, Thomas Reilly^b, ^a*Department of Chemistry, University of Missouri.* ^b*Department of Veterinary Pathobiology, University of Missouri, Columbia, Missouri, USA.* E-mail: rlftfc@mizzou.edu

Francisella tularensis is a category A pathogen found predominantly in the Northern Hemisphere. It has been utilized as a biological warfare agent and is considered a likely weapon of a bioterrorist attack. Delineating the mechanisms of survival and previous investigations suggest that *F. tularensis* acid phosphatase, AcpA, suppresses the respiratory burst and may be important for intracellular survival and multiplication within the host's professional phagocytes. To better understand the molecular basis of virulence, we initiated crystal structure determination studies of AcpA. The gene has been cloned and expressed to high levels in *E. coli*. The crystal structure has been solved to 1.75Å.

Keywords: biomacromolecular x-ray crystallography, crystal structure determination, protein crystallization