Imaging The Genetic Code of a Virus\textsuperscript{1} JENNA GRAHAM, JUSTIN LINK, Department of Physics, Xavier University, Cincinnati, OH — Atomic Force Microscopy (AFM) has allowed scientists to explore physical characteristics of nanoscale materials. However, the challenges that come with such an investigation are rarely expressed. In this research project a method was developed to image the well-studied DNA of the virus lambda phage. Through testing and integrating several sample preparations described in literature, a quality image of lambda phage DNA can be obtained. In our experiment, we developed a technique using the Veeco Autoprobe CP AFM and mica substrate with an appropriate absorption buffer of HEPES and NiCl\textsubscript{2}. This presentation will focus on the development of a procedure to image lambda phage DNA at Xavier University.

\textsuperscript{1}The John A. Hauck Foundation and Xavier University

Justin Link
Department of Physics, Xavier University, Cincinnati, OH

Date submitted: 08 Nov 2012