

Abstract Submitted  
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**Getting DNA by using Silver Spears** SAMANTHA SELGRAPH, TYLER LAUDENSLAGER, Department of Biology, Lock Haven University of Pennsylvania, DONGDONG JIA, Department of Geology and Physics, Lock Haven University of Pennsylvania, LHUP NANOTECH GROUP TEAM — Silver nano needles were prepared with a glancing angle magnetron sputtering deposition method. The tips of the silver needles are about 150 nm sharp. Negatively charged DNA molecules with a length of 150 nm and a width of 3 nm were suspended in a Tris-HCl buffer solution. A positive potential was applied to the silver needles. The silver needles were submerged into the buffer solution. Due to the electrical tip effect, DNA molecules were collected by Coulomb attraction force. Silver needles with DNA deposition were studied with a scanning electron microscope and an atomic force microscope.

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