

# National Institute of Justice

<b>Award Title:</b> Characterization of X Chromosomal Short Tandem Repeat Markers for Forensic Use	
<b>Award Description:</b> <p>The use of X chromosomal short tandem repeat (STR) markers has been greatly increasing in the forensic setting. The marker system offers the potential to provide information in addition to that obtained from autosomal STR systems currently used at crime laboratories and the courtroom, and in certain scenarios, markers on the X chromosome may be the only means of obtaining this information. Any investigated relationship situation where at least one female is involved will benefit from the use of X chromosomal STRs, which can be applied to cases of missing persons, criminal incest, immigration, deficiency paternity or other questioned relationships. In-depth characterization of the marker system is the first step in maximizing the power of this additional tool in the forensic arsenal. This project will build upon previous work performed at the Armed Forces DNA Identification Laboratory (AFDIL), in which two mini-X chromosomal STR multiplexes capable of amplifying 15 total markers were developed and developmental validation studies have been completed. The goals of this project are to perform mutation rate studies, linkage analysis, and mixture evaluation in order to further characterize the X chromosomal STR marker system for forensic use.</p> ca/ncf	
<b>Awardee Name:</b> American Registry of Pathology	<b>Award Number:</b> 2011-DN-BX-K401
<b>Solicitation Title:</b> NIJ FY 10 Forensic DNA Research and Development	<b>Fiscal Year:</b> 2010
<b>Amount:</b> \$81,567.00	<b>Earmark:</b> No
<b>Recovery Act:</b> No	<b>State/Territory:</b> MD
<b>County:</b> Montgomery	<b>Congressional District:</b> 08
<b>Award Status:</b> Open	