National Institute of Justice

Award Title: Use of pressure cycling technology to enhance DNA yield and profile success in touch samples.	
Award Description: Ideally the way to successfully generate profiles from touch DNA samples is to increase the yield from extraction. Pressure cycling technology (PCT) can be used to address the issue of low level DNA yield during the pre-extraction stage. PCT (Pressure BioSciences, South Easton, MA) uses cycles of alternating high hydrostatic and ambient pressures to assist in the recovery of DNA from a variety of sample types, including but not limited to swabs, hairs, tissues, and liquid samples. This project will validate the use of PCT on evidence samples from a variety of sample types. Based on the validation results on sample yields and sample types that demonstrate the best way to use this methodology, a decision will be made whether to implement the technology on DNA case samples from touch evidence and other low DNA yield samples such as hairs. Comparison of results from historical data from HCIFS touch samples or low DNA yield samples such as hairs will provide the forensic community with a thorough evaluation of the best practices for this technology. ca/ncf	
Awardee Name: Harris County, Texas	**Award Number:** 2011-DN-BX-K554
Solicitation Title: NIJ FY 11 Applied Research and Development in Forensic Science for Criminal Justice Purposes	**Fiscal Year:** 2011
Amount: $76,778.00	**Earmark:** No
Recovery Act: No	**State/Territory:** TX
County: Harris	**Congressional District:** 18
Award Status: Open	