

## **Through the Laboratory Door and into the CODIS Database in Less than 2 Hours: The Benefits of Improved Amplification Chemistry in a Databasing Laboratory**

Donald Yet, Aaron Berenter, [Julie French](#)

Michigan Department of State Police, Forensic Science Division, Lansing, MI 48913

Implementation of the new, improved amplification chemistry in a databasing laboratory presents many opportunities to make process improvements and increase efficiency. The elimination of timely and costly extraction steps increases efficiency and allows laboratories to realign resources to improve the overall crime laboratory service delivery model.

The elimination of the extraction and/or purification steps greatly reduces time and increases database lab efficiency. Additionally, the development of improved amplification chemistry combined with the use of automation instrumentation allows the laboratory to quickly generate genetic profiles from biological samples. A genetic profile can be generated from a biological sample collected on Whatman® FTA paper in less than 2 hours. The decreased time for extraction and amplification will allow a databasing laboratory to process more samples, resulting in the timely population of a database with convicted offender and/or arrestee samples, increasing the effectiveness of the CODIS database.