

The Need for Speed: Swiftly Solving Orange County Crime Utilizing Rapid Technology and the OCDA DNA Database

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DNA databases have provided police agencies with investigative leads since NDIS was established in 1998. Unfortunately, due to both resource and instrument limitations, those leads often come months after a crime occurs. As a result, despite the hard work of the lab, leads go cold as detectives focus on current cases, witness memories have faded as the perpetrator commits additional crimes.

But what if the perpetrator could be identified in just hours? The Orange County District Attorney (OCDA) local DNA Database program and our integrated team of attorneys, investigators and forensic scientists were uniquely positioned to embrace Rapid DNA technology to test the concept.

In 2007, OCDA established a local DNA database that now contains over 155,000 Orange County individual DNA profiles and is compared weekly to crime scene profiles provided by the Orange County Crime Lab (OCCL). In 2013, OCDA purchased IntegenX®'s Rapid DNA instrument, the RapidHIT® 200. In 2014, adhering to SWGDAM's validation guidelines for DNA analysis methods, the OCDA validated the RapidHIT® 200 for accuracy, reliability and limits of detection for buccal swabs and crime scene samples. The completed validation established how the instrument could reliably be used to develop DNA profiles from crime scene evidence. OCDA DNA Unit attorneys, investigators and forensic scientists created procedures to accept suitable evidence and immediately search qualifying profiles against the OCDA DNA Database. OCDA has trained 35 Orange County law enforcement agencies in the proper methods for collecting evidentiary samples suitable for Rapid DNA testing. The training also emphasizes the priority for collecting a CODIS eligible sample for OCCL analysis.

Since program launch in September 2014, the OCDA Rapid DNA program has proven that identifying a suspect hours after a crime using Rapid DNA technology and a local DNA database is absolutely achievable. We have seen the investigative and prosecutorial benefits when a lead is obtained in hours instead of months; corroborative evidence is available, witness recollection is fresh and suspects are often still local. An equally important benefit is that innocent persons of interest can be quickly eliminated. From a prosecution perspective, the legal obstacles that stem from delay are eliminated. By providing law enforcement with investigative leads months earlier than traditional DNA testing, the OCDA Rapid DNA program has proved that speed is key to maximize the power of DNA databases to promote public safety.