D40 DNA Backlog Reduction by Triage

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The goal of this presentation is to provide attendees with information regarding a different path for reducing DNA backlog within their respective laboratories, one which has immediate, profound impact, and relatively little cost. After attending this presentation, attendees will have appreciation for a new approach to solving this growing problem in the forensic community.

This presentation will impact the forensic science community by describing the problem set in dealing with DNA backlogs as a result of the significant number of sexual assault cases. This is further complicated by Congressional intervention mandating the reduction of sexual assault cases pending forensic analysis. Several potential tactics will be discussed that could be employed to reduce DNA backlog, as well as describing how the employment of these methods resulted in significant policy changes which benefitted both defense and prosecution by reducing turnaround times.

When most prosecutors, police administrators, and laboratory personnel think of the DNA Reduction Act and the money spent to reduce DNA backlogs, they immediately think of increasing throughput at the laboratory end. This means an increase in manpower and equipment resources that plague governmental institutions in seeking additional revenues. From 2005 – 2009, the year-end backlog of cases at publically funded forensic crime laboratories rose over 200%. While the sheer numbers of submissions increased, so did the number of completed cases. According to National Institute of Justice (NIJ) statistics, crime laboratories are just not able to keep up with the flood of ever-increasing DNA submissions.[1] The federal funding made available through the DNA Initiative has helped state and local governments increase the capacity of their DNA laboratories to decrease backlogs. Without the funds to purchase automated instrumentation, hire new personnel, and validate procedures that are more efficient, the backlog problem would be much worse. Capacity at the laboratories has not yet come close to the demand for DNA testing. Until the demand is met, there will continue to be backlogs.

By published statistics, about $75 million is granted by the Federal Government annually to local and state crime labs in support of the DNA backlog reduction program. This figure is on top of the budgeted costs for initial resourcing and staffing of the supported laboratories. A DNA sample collected and analyzed by a laboratory in support of criminal justice work costs between $800 – $2,500 per sample, a cost per additional suspect identified is $4,502, and a cost per additional arrest is $14,169.[2] Many government laboratories have taken the step to contract with commercial DNA labs to reduce these backlogs adding to the financial burden. Until the demand is met, there will continue to be backlogs. The presentation will cover the necessary statistics regarding the cost of DNA backlogs, and DNA testing as a basis for the cost savings associated with this tact.

This presentation will discuss the methods and rationale used at a major U.S. crime laboratory where, by using a panel of experts, we were able to quickly and efficiently reduce the physical DNA backlog by up to 40%. In addition, we will be discussing the metrics and rationale used in expeditionary laboratory environments to ensure that on the highest payoff cases, the most probative evidence is front-loaded, yielding real, actionable information for investigations.

The presentation will also address additional outcomes of the triage efforts, as well as some amusing, and less-than-probative, laboratory requests that were collaterally eliminated as a result of this effort.

References:

1. Nij.gov/nij/topics/forensics/lab-operations/evidence-backlogs/dna-casework-trends.htm
2. Roman, A., Reid, S., et all (2008) The DNA Field Experiment: Cost- Effectiveness Analysis of the Use of DNA in the investigation of High-Volume Crimes: U.S. Department of Justice research report.

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 ** Presenting Author*