

DEFINING AND REFINING A FAMILIAL DNA SEARCH PROGRAM – THE WISCONSIN EXPERIENCE

Jennifer Honkanen, Angela Schroeder, Amanda Hahn, Jennifer Naugle, Melisa Wittkowske, Wisconsin Crime Laboratory Bureau

Over a two year period, the Wisconsin Crime Laboratory Bureau (WCLB) developed a tool to deliberately search the state's offender DNA database for possible biological relatives of a suspect. During this period the WCLB crafted a policy, created operating procedures, and validated software to perform the search. The WCLB chose to use a pilot program approach to evaluate the effectiveness and feasibility of providing this service to our law enforcement agencies. By using this approach, the WCLB was able to make continual improvements to the policy, operating procedures, reporting, and customer outreach.

As of June 2015, the WCLB has completed 7 familial search cases in a 14 month period. The first case had a turnaround time of 3 months while the most recent case was completed in less than 30 days. Cold case homicides and serial and/or violent sexual assault cases were selected for familial searching during the pilot project. Three cases have resulted in concordant Y-STR matches. So far, two of those cases have led to convictions and one is in investigative stages. Additionally, two cases have resulted in a top female candidate with at least one matching allele at every locus. These two cases are both still in investigative stages.

Overall, the WCLB has had a tremendous amount of success with the Familial Search tool. This success has reinforced that the policy and procedures are well designed. Further, using a pilot program approach, the WCLB was able to take the time to appropriately define and refine the process which has streamlined the turnaround time and will facilitate the release of information to law enforcement.