

## **A DECADE OF HIGH THROUGHPUT AUTOMATED DIFFERENTIAL DIGESTION PROCESS**

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In response to the growing public and legislative demands for expedited examination of sexual assault evidence kits, forensic laboratories have implemented innovative protocols and automated liquid handling workstations. This strategic approach aims to address the factors contributing to the backlog of sexual assault kits, such as limited staffing and the labor-intensive nature of the differential digestion process.

A decade ago, the Oakland Police Department recognized the need for a more efficient and timely examination of sexual assault evidence kits. To meet this challenge, we validated and implemented an automated differential digestion protocol utilizing the VERSA 1100 automated liquid handler workstation developed by Aurora Biomed. This cutting-edge liquid handling workstation proved to be a crucial component in streamlining the examination process.

In this poster presentation, we will take you on our journey spanning the last ten years. We will share our experiences, challenges, and successes in handling the overwhelming demand for a prompt examination of sexual assault evidence kits. Through the utilization of VERSA 1100 Differential Digestion workstation and improved automated protocols, we have made significant advances in expediting the analysis while maintaining the highest standards of accuracy and integrity.

We delve into the transformative impact of automated liquid handling workstations and highlight the pivotal role played by the VERSA 1100 from Aurora Biomed. Witness firsthand how our approach has optimized the workflow, improved efficiency, and ultimately contributed to the timely delivery of justice for victims of sexual assault.