

The AdvANTAGE of High Throughput Forensic Casework Automation

Heather Sarik, Kristen Naughton

Bode Technology, 10430 Furnace Road Suite 107, Lorton, VA 22079

Across the United States, legislation is being enacted to address the issue of unsubmitted and backlogged sexual assault kits. New requirements include mandatory inventory, tracking, submission and timely testing of kits. These initiatives, along with an infusion of millions of grant funds, have heightened expectations of stakeholders and increased visibility of forensic laboratories. This unprecedented surge in demand is often resulting in two to three times more sexual assault kits being submitted to already overburdened crime laboratories which has resulted in significant capacity issues and the potential de-prioritization of other casework such as property crimes.

This presentation focuses on identifying the potential challenges of “test all” legislation on laboratories and examples of how Bode Technology has re-evaluated workflows and implemented automation to double capacity with a minimal increase in staffing. The goal of the presentation is to showcase how the VANTAGE instrument can provide attendees with a variety of solutions to potentially implement in their own agencies to overcome similar capacity challenges. Specific features of the VANTAGE instrument to be showcased include, but are not limited to, the large deck capacity combined with the scheduling workflow to process a large number of samples in a short amount of time and the use of Hamilton Heater Shakers and Internal Plate Gripper for a completely hands-off approach.

The presentation will highlight how Bode uses automation to increase sample capacity and, in most cases, provide results in less time than conventional methods while at the same time increasing the quality of results. It will encourage discussion on the use of automated DNA purification on forensic cases. Lastly, the presentation will touch on the automation of additional DNA processing and future plans to bring such processes to the VANTAGE platform.