MORE THAN MEETS THE EYE: ROBOTICS BEYOND VALIDATION

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Implementing automation is an exciting, though large task for most any DNA forensic laboratory. The immediate benefits from automation can positively impact a lab's ability to meet ever increasing case workloads and assist in eliminating backlogs with increased throughput. Automation improves many aspects of production, but can also introduce new challenges in laboratories unaccustomed to the intricacies of automated liquid handling. Issues like robotic pipetting calibrations, deck position teaching, and further programming development/optimization become commonplace topics for any lab using diverse robotic platforms. Sorenson Forensics and their automation specialist team offer some key considerations and tips that come from years of hands on experience developing and validating liquid handling methods for end-to-end automation, both new and old to the automation community. As laboratories increase in size, capacity, or are even just looking to continue to improve their product quality, method optimization can be performed through building more savvy methods. Outlined here are some tips on troubleshooting common issues, further optimization of current methods, and insight on how to expand the use of robotic methods with improvements to get the most out of their automation after validation.