

## **NIMBUS: CLEAR SKIES FOR PRE-AMP WORKFLOW**

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Most small forensic biology sections with less than ten employees, do not require large footprint automation instruments such as a Hamilton STARlet, Tecan EVO 150, or Qiagen Symphony. However, all forensic staff/ laboratories must continue to perform “more with less” and automation, even with smaller budgets, is a necessity. The Hamilton Nimbus name association with a cloud is a play on words where the “sky is the limit” as it is an ideal instrument for such a task in the pre-amplification workflow. It is cost effective, has a small footprint, and yet still has open programming formatting for complete control to each laboratory’s unique workflow with the ability to integrate barcode tracking. It has the ability to perform an array of processes with accuracy and precision “as right as rain”, where our laboratory’s focus was in qPCR to amplification setup.

As flexible as the Hamilton Nimbus is to perform such processes, the initial learning curve for programming advanced operations can be a daunting task. Especially when considering the amount of time it would require to become proficient, followed by the programming and validation of the instrument itself. The laboratory acquired the assistance of Sorenson Forensics who has extensive knowledge of our facility’s current workflow, Hamilton Robotics, and validations. Together, the team designed studies that built confidence in the pipetting capabilities, sample tracking, and ensured the instrument would meet our current workflow needs that include Y-screening, qPCR setup (Thermo Fisher Quantifiler Trio), normalization, and amplification setup (Identifiler Plus) leaving us on “cloud nine”.