

THE LATEST CASEWORK FASHIONS AT THE CA DOJ JAN BASHINSKI DNA LABORATORY

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The casework section of the CA DOJ Jan Bashinski DNA Laboratory has transitioned to enhanced throughput and a more informative system. A Tecan robot has been implemented to set up PCR reactions of casework samples in 96-well reaction plates. The AmpFISTR Identifiler PCR amplification kit is being used in conjunction with the 3100 GeneticAnalyzer.

Validation studies of the 3100 Genetic Analyzer will be presented including signal variation across arrays and precision studies, particularly comparing data analyzed with Local versus Global southern methods and discussing temperature effects unique to the 3100. Select studies of Identifiler products will be discussed, including an inhibition study in which inhibition was overcome by enhanced TaqGold and bovine serum albumin. Interesting observations made during validation will also be presented.

Finally, the application of Genemapper ID to casework will be compared and contrasted to that for databank analyses. The handling of unusual profiles and the use of PQV's for profile visualization will be demonstrated.