IMPROVED STR WORKFLOW THROUGH THE AUTOMATION OF SAMPLE NORMALIZATION AND STR REACTION SETUP FOR POWERPLEX® SYSTEMS

Robert Ray, BS and David Yoder, Ph.D., Promega Corporation

With the impending expansion of the CODIS core loci and increasing workloads, implementing automated solutions for normalizing samples and preparation of short tandem repeat (STR) multiplexes is an efficient method to compress this often time intensive workflow.

To demonstrate the combined power of Promega's STR Normalization Manager software, PowerPlex® STR technology, and automation, the authors developed several methods on the Hamilton STARlet liquid handling workstation. The method highlighted incorporates extracted DNA normalization with the preparation of PowerPlex® multiplexes in full volume and half volume reactions using extracted DNA. The authors will present the time-saving benefits of the automated solution and performance data using PowerPlex® Fusion, PowerPlex® ESI 17 Fast, PowerPlex® 21, and PowerPlex® Y23 Systems.