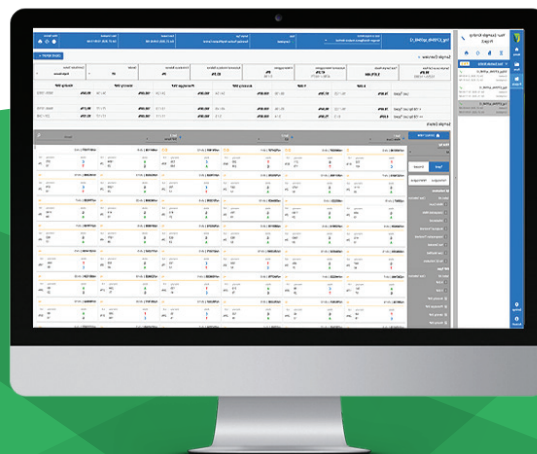


Accredited Advanced DNA Methods Give New Life to Tough Cases

Next Generation Sequencing for FIGG with Kintelligence

Forensic scientists at Signature Science, LLC's Center for Advanced Genomics (CAG) completed an internal validation of the ForenSeq® Kintelligence workflow for the MiSeq FGx® Sequencing System in 2023 demonstrating DNA inputs down to 50 pg.

2023
ASCLD FRC
Outstanding
Validation
Awardee



This kit could open up the FIGG space to our clients who have been holding on to really challenging samples.

Christina Neal
Technical Lead



- MiSeq FGx platform approved by FBI for use in generating DNA profiles for upload to the National DNA Index System (NDIS).
- Targets forensically relevant markers, along with ancestry, identity, and phenotype markers, to estimate kinship.
- Optimized for degraded and low-input DNA samples from a range of sample types including bone (insults: embalmed, burned, cremains, and surface decomposed), spent shell casings, and tape.
- Custom bioinformatic pipelines (k2v; see recent CAG publications) ensuring data integrity and quality.
- Bioinformatic data preparation for long range kinship estimate in GEDmatch PRO; through genetic genealogy this will inform construction of a family tree.



Watch the On-Demand
Kintelligence Webinar



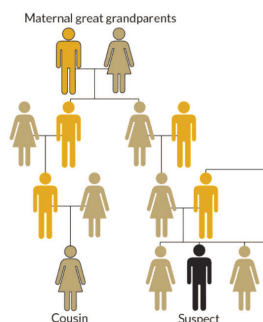
Read the Kintelligence
Validation Study

signature
science[®] LLC

www.sigsciforensics.com

SNP Genotyping by Forensic Scientists and Optimized for Forensic Samples.

In addition to the Kintelligence workflow, Signature Science offers a microarray genotyping-based FGG service, featuring sample extract quantification and preparation for SNP genotyping by CAG forensic scientists using the Infinium® Global Screening Array (GSA)-24 Kit [Illumina]. Samples are run in-house on an Illumina iScan®.



Improved Sensitivity for Forensically Relevant Sample Types. In their developmental validation of SNP genotyping using the GSA for samples run on the iScan, CAG scientists demonstrated sensitivity to DNA input levels of 0.2 ng, three orders of magnitude less than the manufacturer's recommended input of 200 ng.



Read the
GSA Validation Study

ANAB Accreditation Issued

Signature Science's Advanced Genomics Laboratory has been issued accreditation by ANAB, the ANSI National Accreditation Board, to the ISO/IEC 17025:2017 quality standard as a testing laboratory for Single-Nucleotide Polymorphisms (SNPs) using Massively Parallel Sequencing (MPS). In addition, the laboratory was successfully assessed for conformance to FBI Quality Assurance Standards for Forensic Testing Laboratories.



Read the Press Release

Ongoing Research at the Center for Advanced Genomics. The CAG is working in collaboration with contributors at National Bioforensic Analysis Center (NBFAC) on MixDeR; a solution to deconvolute SNP Mixtures for Forensic Genetic Genealogy.



Learn More



Have questions? Need a quote?

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