OVERVIEW OF A LAB SUPPORT SYSTEM FOR MANAGING DATA FROM DNA EXTRACTION AND GENOTYPING FOR HUMAN IDENTIFICATION

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The software system enables the control and management of lab procedures ranging from DNA extraction to editing genotyped data. The system recognizes each ID number labeled by a computer readable tag to record such samples and consumables. Then it links to other related information of the sample such as case number, date and time and other available sources including genotyped data. It also tracks such data automatically to identify any inconsistent results providing a QC function on samples such as positive controls. Furthermore, the system can monitor and filter STR stutter using a new unique algorithm derived in our laboratories.
We have applied an alpha version of this system to test data from missing persons at Shinshu University. The system is capable of data management, monitoring quality and evaluating STR multiplex genotyping results.