



Physical Anthropology Section – 2010

H126 An Innovative Software Solution for Large Scale Forensic Identification Efforts

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After attending this presentation, attendees will learn how integrated informatics systems can be developed and used to greatly facilitate complex forensic identification efforts.

This presentation will impact the forensic science community by increasing the understanding and capacity of the forensic science community to deal with large scale identification projects.

More than 40,000 persons went missing as a result of the conflicts in former Yugoslavia from 1992-1995. The International Commission on Missing Persons (ICMP) was established in 1996 with a primary goal to assist local governments to resolve the matter of missing persons. As part of its technical assistance, the ICMP applies an integrated approach involving advanced forensic disciplines, such as forensic archeology, forensic anthropology, forensic pathology, and DNA matching. This generates and utilizes vast amounts of data, which much be archived, tracked, accessed, and reported. Due to the limited availability of suitable software solutions, ICMP has committed itself to development of a software solution to support all its forensic activities.

A group of software engineers started with development of an integrated software solution now known as Forensic Data Management System (fDMS) in the beginning of 2006. As a result of interaction and cooperation with ICMP and other forensic experts in their respective fields of expertise, the team analyzed, designed, developed, tested, and deployed a set of applications for support of all forensic activities. The fDMS enables DNA-led identification process in the large scale.

Each application can be used as stand-alone individually or as a part of integrated system. The fDMS supports entering, storing, and processing data about missing persons, relatives, field activities, and forensic archaeology, anthropological examination and skeletal inventory process, chain of custody, DNA analysis, DNA matching, and identification. This presentation will present an overview of both the development and capabilities of the fDMS system and illustrate how the integrated database and software package facilitates the effective conduct of forensic sciences in a large scale identification system.

Data Management, Forensics, DNA Identification