W5 UVIS Dental Identification Module (UDIM) — A Hands-On Workshop

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After attending this presentation, attendees will: (1) become familiar with the functionality and features of the Unified Victim Identification System (UVIS), the UVIS Case Management System (UVIS-CMS), and the UDIM Stand Alone (UDIM-SA) software systems; and, (2) gain experience in order to enter, search, and compare antemortem and postmortem dental data utilizing the UDIM-SA software to identify a decedent.

This presentation will impact the forensic science community by providing attendees with a working knowledge of the UDIM, a component of a complete forensic case management system.

Following the World Trade Center and American Airlines Flight 587 disasters, the Office of Chief Medical Examiner of the City of New York (OCME) undertook a multi-year project of creating a browser-based fatality management system, UVIS, to aid in the identification of mass fatality victims. Based on research and lessons learned following these Multiple Fatality Incidents (MFIs), a new dental module, UDIM, was introduced to the forensic odontology community. The goal of this workshop is to provide hands-on experience with this module.

UVIS is a comprehensive disaster-management software system designed to coordinate all of the activities related to missing persons reporting and victim identification. By integrating key functions in Disaster Victim Identification (DVI), the software coordinates all the essential tasks necessary to develop an accurate manifest of potential victims as well as coordinating all components of remains management.

The UDIM can function as either an integrated module within UVIS or as a stand-alone dental identification software program, UDIM-SA. It is designed to be used for both daily operations or as an MFI dental identification module.

UDIM-SA is capable of recording detailed charting with its "click-to-code" interface, conduct complex searches utilizing optimized state-of-the-art unified ranking algorithms, and has the ability to find and highlight anomalies. The state-of-the-art coding interface not only allows the coding of restored surfaces, but also more complex restorations such as root canals, posts, implants, and implant abutments. Another unique feature of UDIM-SA is its detailed "self-correcting" coding interface. Built-in reference tables prevent the forensic odontologist from entering illogical or contradictory codes. UDIM also uses a unique color-coded comparison odontogram to decrease reconciliation times. This color coding allows for a more simplified comparison process of antemortem and postmortem data by highlighting explainable and unexplainable discrepancies. In addition, UDIM has extensive partial jaw fragment management, linking and joining of specimens, and unlimited image importation. UDIM-SA also has the ability to integrate with digital radiographic software which, with the unlimited image importation, makes UDIM a fully paperless dental forensic management system.

The current version of UDIM has been enhanced with a more robust security system. With four different odontology roles, administrators can control access to numerous submodules. From the forensic dental operator with read-only access to a full administrator, UDIM-SA allows a municipality to customize the software access based on the odontologist's skill and experience. The current version of UDIM has been upgraded to allow for the exportation of data and a customizable translation table allows conversion to other coding systems including the new Type-12 Dental Data set for the American National Standards Institute/National Institute of Standards and Technology-Information Technology Laboratory (ANSI/NIST-ITL).

Participants will receive in-depth didactic instruction regarding the use of the program. This will be followed by hands-on training utilizing the UDIM-SA program to input both antemortem and postmortem dental information and perform reconciliation of this data utilizing UDIM advance comparison features.

UDIM, Dental Identification, Forensic Odontology

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