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**THE DENTAL FORENSIC DATA SUPPLEMENT
TO ANSI/NIST-ITL 1-2011**

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Associate Clinical Professor at NYU College of Dentistry and at the Department of Dentistry at Mount Sinai Medical Center. He began his forensic odontology career in 2001 and was appointed a Forensic Odontologist by the Office of Chief Medical Examiner, NYC, in 2002 and Assistant Chief Forensic Odontologist in 2009. He is a fellow of the American Academy of Forensic Sciences, the American College of Dentist and The Academy of General Dentistry. Dr. Aschheim is considered a subject matter expert in the field of dental coding and software data transference. In 2007, he helped design the UVIS Dental Identification Module (UDIM) for NYC's Unified Victim Identification System (UVIS). That same year, he was appointed chairman of the American Dental Association's Joint Working Group 10.12 on Forensic Odontology Informatics. In 2010, the group published the ADA/ANSI Specification 1058 - Forensic Dental Data Set. In 2011, he began work with the National Institute of Science and Technology (NIST) to be an editor of the Dental Forensic Data Supplement to ANSI/NIST-ITL 1-2011.

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Forensic odontology comparison software utilizes numerous dental descriptors and advance sorting algorithms to create a ranking of possible matches. Dental identification is based on similarities and differences of individuals, based on these descriptors, as well as supporting biometric and familial radiographs and visual information. Unfortunately, different forensic odontological software packages utilize different coding schema of varying degrees of granularity, specificity and ambiguity which makes the electronic transfer of this data between systems difficult.

In October, 2006, The American Dental Association (ADA) Standards Committee on Dental Informatics (SCDI) Joint Working Group 10.12 on Forensic Odontology Informatics was formed with a mandate of creating a standardized data dictionary of harmonized terms and definitions necessary to adequately serve the Forensic Odontology community. In 2010, the American National Standards/ American Dental Association Specification No 1058 Forensic Dental Data Set (ANSI/ADA Spec 1058) was published.

The ANSI/ADA Specification 1058 consisted of six antemortem standardized nomenclature data sets and four postmortem sets. From the onset, the goal of the ANSI/ADA Spec 1058 was not to define the extent of information collected, but to be certain that that there is no ambiguity in the meaning of common terms used to aid in human identification.

At the 2011, at an ANSI/NIST-ITL workshop, a proposal was presented by the Government of Argentina to create a new ANSI/NIST-ITL record type (Type-12) that would define a standardized electronic transmission of ANSI/ADA Spec 1058 information to all compatible software. The Dental Working Group of ANSI/NIST-ITL was established and over the next two years held several meetings to various audiences interested in forensic dental data. The Working Group met major dental data systems owners and developers and potentially affected stakeholders to make certain that their data transference criteria were met.

The proposed dental supplement, based on ANSI/ADA Standard No. 1058, primarily focuses on the use of dental data for identification of human remains when an unknown human decedent or living amnesic is encountered by law enforcement. The Supplement also allows for the exchange of data and images of suspected patterned injuries of intraoral origin as well as other biometric information latent image of possible perioral origin. The standardized data dictionary for this data set will be included in a future ADA Technical Report No. 1077 for Dental Biometric Descriptors.

The ANSI/ADA Spec 1058 provides a coherent and consistent manner of describing teeth and oral conditions and other data necessary to perform a forensic dental comparison. The ANSI/NIST ITL dental supplement facilitates the exchange of information and promoted system interoperability by defining the XML format and coding rules. Together the two standards facilitate the exchange of data to law enforcement agencies and forensic odontological management systems that may use different data storage and/or matching systems.

KEYWORDS: Forensic Odontology, Mass disasters, Dental Standardized Nomenclature.