

PROCEEDINGS

# American Academy of Forensic Sciences

## 75th Anniversary Conference



# Science Works

February 13-18, 2023  
Orlando, Florida  
Rosen Shingle Creek Resort



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### ***PROCEEDINGS***

of the American Academy of Forensic Sciences 75<sup>th</sup> Anniversary Scientific Conference

The *Proceedings* of the American Academy of Forensic Sciences is an official publication of the American Academy of Forensic Sciences (AAFS). It is devoted to the publication of the abstracts of technical oral papers and posters presented at the AAFS Annual Scientific Conference. These include various branches of the forensic sciences such as anthropology, criminalistics, digital evidence, forensic nursing, engineering, jurisprudence, odontology, pathology, psychiatry, questioned documents, and toxicology. Similar submissions dealing with forensic-oriented aspects of the social sciences are also included.

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**of the American Academy of Forensic Sciences**

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### C34 Potentialities of the Anatomage Table in Forensic Training and Education Programs

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**Learning Objective:** After attending this presentation, attendees will have learned concepts and foundations of the Anatomage Table and its relevance not only for the human anatomy teaching but also for the virtual human dissection in forensic pathology and odontology training course.

**Impact Statement:** This presentation will impact the forensic science community by helping attendees learn the use of virtual and augmented reality to familiarize themselves with postmortem procedures and collection of optoctic parameters.

The Anatomage is a modern digital tool for studying human and animal anatomy using life-sized 3D reconstructions obtained from segmentation of multimodal images (Computed Tomography [CT] scans, Magnetic Resonance Imaging [MRI], photogrammetry).<sup>1</sup> The Anatomage Table is a life-size 3D intuitive touchscreen that allows virtual dissection, interactions, and control features, including the turning on and off of selected structures categorized on various cadaver models as well as real size measurements. Users learn human anatomy and can virtually dissect or observe selected structures by applying arbitrary clipping planes on all directions required. Cases Library contains an extensive collection of CT and MRI scans, including 4D scans showing changes over time. Forensic training programs for pathologists and odontologists include autopsy training sessions on cadavers to learn how to assess the cause of death, collect data for human identification, and interpret radiological scans.

Human anatomy is a fundamental element in the process of teaching and training programs, which requires the availability of cadavers.<sup>2,3</sup> In certain countries, this training may be challenging given the limited availability of cadaver lab programs and the cost of such training. Following the COVID-19 pandemic, it has become increasingly common to study using online tools and virtual or augmented reality.<sup>4,5</sup> The Anatomage Table can mark a turning point in the learning process of postmortem data and radiological data collection and analysis for the purpose of teaching autopsy procedures and standardized collection of optoctic parameters as well as to familiarize oneself with radiological images. The Anatomage virtual dissection should be considered an adjunct training tool as it cannot replace the *in situ* examination of cadavers of the forensic training program, but it is an effective tool in forensic pathology and odontology education and training. This tool could also be used remotely for real forensic casework or to request a second expert opinion.

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#### Anatomage; Education; Virtual Dissection