

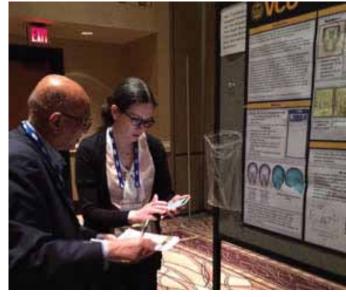
Craniofacial Analysis of 3D Computed Tomography (CT) Models & a New Method for Dense Facial

Tissue Depth Mapping:

A Collaboration Between Forensic Science Researchers and Forensic Art Practitioners

Terrie Simmons-Ehrhardt, MA*, Catyana R. Skory Falsetti, MFS, Christopher J. Ehrhardt, PhD,

Much interest was generated for this poster. After attending this presentation, attendees understood how the quantitative and morphological analysis of 3D CT models can enhance facial approximation research by facilitating researcher-practitioner collaborations.



This presentation impacted the forensic science community by presenting new craniofacial relationships for the enhancement of facial approximation methods based on 3D CT skull and face models. In addition, new methods will be presented that facilitate comprehensive analysis, viewing, and sharing of 3D data.

Although facial approximation is described as a collaborative endeavor between anthropology, anatomy, and art, forensic artists have rarely been included in research. The exclusion of artists from research efforts has led to a lack of standardized protocols with many artists still using outdated standards and tissue depth tables. By including artists in craniofacial research, it can be ensured that the data being collected is relevant to facial approximation methods and encourage the incorporation of new data into facial approximation protocols.

A Case for Using Mixed Method Research to Investigate the Relationship Between Art and Science in Forensic Facial Reconstruction

Daniel Marion presented a poster that was well received.

This presentation impacted the forensic science community by opening a methodologically informed conversation within the forensic arts about mix method research and the art/science of the work.

The intent of this presentation is to make a case for the use of mixed qualitative-quantitative research methodologies as an appropriate means to invesgate the ill-structured, commingled contributions of art and science in the facial reconstruction process.

Mixed research methodologies are better suited to represent a balanced account of the contribution of subjective art — image making — and how it flows together with the objective science — anatomy — in the facial reconstruction process.





Progressive Forensic Exhibit Techniques for Court

Catyana R. Skory Falsetti, MFS

Catyana Falsetti gave this presentation to the Jurisprudence Section. It was well attended. After attending this presentation, attendees better understood how contemporary methods of forensic art and animation technologies are employed in court and how these methods can advance the clarity and absorption of case information.

This presentation impacted the forensic science community by providing examples of the techniques used in modern courtroom exhibits and the variety of types of models and images that go beyond the expected and beyond what has been used in the past. This presentation will introduce attendees to the possibilities of what can be accomplished in the courtroom when it comes to visual exhibits. The Maricopa County Attorney's Office of Phoenix, AZ, was forward thinking in the creation of a full-time civilian forensic exhibit specialist position in 1998. Because of an increased caseload and a desire to address client needs, this role expanded to three full-time forensic exhibit specialists in 2014. These individuals are available to all of the Maricopa County Attorney's Office attorneys for any of their exhibit needs.

Unfortunately, no photos were taken at this presentation!

