



Anthony Falsetti, PhD

Associate Professor, Forensic Science Program

Education

PhD, Anthropology, University of Tennessee

Key Interests

Human Rights | Strong Judicial Institutions | Forensic Science | Forensic Anthropology | Taphonomy | Trauma | Postmortem Interval | Bias in Forensic Science | Biometrics | Skeletal Aging Methods for Young Adults

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SELECT PUBLICATIONS

- Simmons-Ehrhardt, T., *et al.* (2018). Open-source tools for dense facial tissue depth mapping of computed tomography models. *Human Biology*, 90(1), 63-77.
- Falsetti, A.B., *et al.* (2019). Scanning electron microscopes with energy dispersive x-ray spectroscopy (SEM/EDX) analysis of gunshot residue (GSR) on pig bone, poster presented at the Annual Meeting of the American Academy of Forensic Sciences.
- Falsetti, C.R., *et al.* (2017). Forensic art and imaging: Best practices for evidence handling. *Forensic Evidence Management*, pp. 163-170.
- Coble, M. D., *et al.* (2009). Mystery solved: the identification of the two missing Romanov children using DNA analysis. *PLOS ONE*, 4(3).

Research Focus

I am currently performing research in microbiomes and their utility in determining the postmortem interval and geolocating with specific applications to border crossing deaths and unidentified persons, human facial growth in human children using 3D CT scan technology, and using SEM and XRF to study bone trauma. I have been deployed to many mass fatality situations including military mishaps, commercial airline mass disasters (American Eagle, TWA 800), domestic terrorism (Oklahoma City Bombing), foreign terrorism (World Trade Center), and natural disasters (GA Floods, Thai Tsunami and Haitian Earthquake). In Bosnia and Herzegovina, I was the Deputy Director for the Forensic Department of the International Commission on Missing Persons where I managed mortuaries and field teams whose mission was to excavate, recover and identify victims from the Bosnian Conflict 1992 to 1996. I apply forensic science principles to the collection of evidence, identification of victims of genocide and other mass fatality incidents in order to support the stated goals of the Declaration of Human Rights and the families rights to know the fate of their loved ones.

Current Projects

- A project to study how microbes can be used to geolocate individuals.
- Research in better facial approximation methods to identify unidentified decedents.
- Using processing mining on Cold Cases.
- Experimenting with SEM to detect evidence of gunshot wounds on bones.