



### A31 Humanitarian Forensics: Applications Today and Emerging Challenges

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**Learning Overview:** After attending this presentation, attendees will better understand the application of forensic science in the humanitarian sphere and how the evolution of conflict is changing the way we think about how forensic science is applied.

**Impact on the Forensic Science Community:** This presentation will impact the forensic science community by highlighting the need to rethink the approach that has been taken over past decades to the application of forensics in conflict.

The last (approximately) 40 years have seen a growing role for, and application of, the diverse range of fields of forensic science to the humanitarian and human rights field. This has been particularly true for the field of forensic anthropology. The 1980s saw the emergence of this with the work of teams such as the Argentine Forensic Anthropology (EAAF) team, spawning a number of similar groups throughout Latin America.

Following its emergence, growing advancements in forensics, such as the fields of forensic anthropology and genetics, saw the large-scale application of forensics in regions such as the Balkans, following the conflicts there toward the end of the 20<sup>th</sup> century. The experiences of the Balkans brought some balance to the understanding of what was possible, in theory and in practice, when it came to the use of forensics to both assist in the pursuit of justice (e.g., International Crimes Tribunal for the Former Yugoslavia) and the humanitarian need for the identification of the many persons who remained unaccounted for at the end of the conflicts. While great advances were made in forensics throughout the world due to this work during the 1990s and early 2000s, particularly when it came to understanding the recovery and analysis of large-scale assemblages of human remains (for which forensic anthropology played a growingly invaluable role), it was also clear that there were limits as to what could be achieved. Hopes to see the identification of all those who were unaccounted for were soon tempered by the practical realities of situations encountered.

Nearly 20 years later, we have a much better understanding of forensic science and how it can be applied in both conflicts and disasters. There has been a growing shift away from the large post-conflict and post-disaster response, to better understanding how forensics, and forensic anthropology, can assist in both preparations for possible disasters and also better support efforts to identify persons who become unaccounted for because of conflict by engaging prior to and during conflict itself. In many ways this is the emergence of a new era in the application of forensics to humanitarian and human rights issues. The evolution of conflict today, with a more protracted and urbanized character, means we need to further rethink how forensics can continue to be relevant and applicable. Recognizing the need for strengthening global forensic science and supporting the empowerment of domestic forensic structures, where present, is fundamentally important. There continues to be very weak structures when it comes to the field of forensic anthropology and much needs to be accomplished to understand how to best address this. The experiences of organizations such as the International Committee of the Red Cross, which today globally has the largest forensic team working in the humanitarian sphere, is demonstrating that the delivery of ad hoc short courses in forensic anthropology in many ways risks undermining the discipline itself, if the correct target audience is not identified. The use of data, in particular, ideas around big data, and predictability models to help determine the location of persons unaccounted for will also be important areas of study.

Ultimately, a better understanding of conflict, disaster, and the cultural, religious, and social needs of the affected population will be key if the emerging field of humanitarian forensics is to continue to play a growing and valuable role in the 21<sup>st</sup> century.

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### Humanitarian Forensics, Armed Conflict, Emergency Response