AN EVENT-BASED DEFINITION OF "FORENSIC" AND "BIOMETRIC" APPLICATIONS OF IDENTIFICATION TECHNOLOGIES

Max M. Houck, Ph.D.
Analytic Services, Inc. (ANSER)

Given their popularity, definitions for the terms "forensic science" and "biometrics" are everywhere yet often misused or interchanged, even by professionals. This poster examines and updates a 2003 distinction[1] between biometric and forensic applications of identification technologies that views an event as the central defining node between the two disciplines:

- Applied *before* an event, such as a required verification before gaining access to something ("Am I who I say I am?") or identification that is necessary to proceed ("Who am I?", for example, "Am I on a 'watch list'?"), the identification technology is *biometric*.
- Applied *after* an event, such as a crime ("Who is the victim?" or "Who is the suspect?"), the identification technology is *forensic*.

As a *future-based* application, biometrics has the luxury of choosing which mode of identification is most suited to the purpose. As a *history-based* application, forensic science is relegated to whatever modalities are possible, given what evidence is left behind (DNA, fingerprints, hairs, and similar). This temporal distinction firmly fixes methodologies, applications, and interpretations for both disciplines; for example, biometrics almost always deals with a "closed population" of individuals in a database while forensic science has to work with the "open population" of unknown suspects or victims.

Room for interpretation exists, such as with agencies preventing an event from happening, such as a criminal or terrorist act—is it truly "before" or "after" if the event is prevented?—but this distinction helps to make clear the differences in specificity, methodology, and modality required by each discipline.

References:
[1]Houck, M.M. and Rood, E. 2003. "Forensics and Biometrics: What's the Difference?", *Biometrics Consortium Conference*, Crystal City, VA.