



## Physical Anthropology Section - 2014

### H122 An Integrated Approach to the Identification of Human Remains: The Biocultural Profile of Undocumented Migrants

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After attending this presentation, attendees will learn about the integration of sociocultural and biological factors used to establish the biocultural profile of undocumented migrants at the Pima County Office of the Medical Examiner (PCOME). This presentation will expand upon the Undocumented Border Crosser (UBC) profile and advocate for a biocultural approach to forensic anthropological casework.

This presentation will impact the forensic science community by introducing the biocultural profile of undocumented migrants, which will assist medical examiners' and coroners' offices in the identification of probable Mexican and Central American migrants dying within United States jurisdictions.

Over the past decade, the PCOME has examined the remains of over 2,000 suspected UBC's from various regions of Latin America. Approximately 1,300 of these individuals have been identified as foreign nationals, while the remaining 700 are likely migrants as well. The large caseload and unique circumstance of people dying while crossing the border compelled examiners at the PCOME to create a systematic way of distinguishing between American and foreign-born Hispanics, and lessons learned from the examination of 1,300 identified migrants has led the PCOME to take these criteria and apply them to suspected migrants. The resulting UBC profile distinguishes Hispanic foreign nationals through locational context, personal effects, and an anthropological determination of ancestry consistent with individuals from Latin American countries.<sup>1</sup> The "cultural profile" was designated to describe the non-biological aspect of the UBC profile, including culturally specific personal effects like religious icons, and foreign identification cards, and currency, body modifications such as cosmetic dental ornamentation, and short stature and poor oral health.<sup>2</sup> Reineke and Anderson argue that "since migrants are defined not by biology or culture but by the fact of marginality—people clandestinely entering the country for economic reasons—each marker in the suite of characteristics that make up the UBC profile should indicate marginality in this border context."<sup>3</sup> Therefore, many features of the cultural profile are social or economic in nature and should be labeled the "sociocultural profile," since both socioeconomic and cultural factors are assessed.

The first goal of this presentation is to expand upon the sociocultural profile and introduce the "biocultural profile," a component of analysis that can narrow the range of possible sub-groups in unidentified persons cases. In this context, the biocultural profile is defined as the manifestation of cultural and socioeconomic factors on the physical body, whether integrated into one's biology (e.g., skeletal indicators of health, oral pathologies) or applied as semi-permanent modifications observable on one's remains (e.g., tattoos, dental ornamentation, dental restorations). As demonstrated at the PCOME, these features, analyzed in conjunction with the biological assessments of age, sex, ancestry, stature, and increasingly DNA profiles, can further differentiate individuals as belonging to more specific economic, cultural, social, or ethnic groups.<sup>4</sup>

The final goal of this presentation is to present a biocultural profile specific to undocumented migrants, which can be useful in differentiating the remains of undocumented Hispanic migrants from those of American-born Hispanics. Many characteristics of the UBC profile, such as locational context or personal items carried while crossing the border (food/water, foreign identification media, and papers with phone numbers), are not appropriate to migrants living within the United States; however, features of the sociocultural and biocultural profiles (tattoos, cosmetic dental work, and skeletal indicators of stress) are applicable everywhere. Within the undocumented migrant community, a significant component of the biocultural profile includes biological indicators of marginality such as poor oral health, poor dental work, short stature, poorly-set healed fractures, and skeletal indicators of stress, all of which may remain visible on the body long after an individual has migrated to the United States.<sup>5</sup>

With anticipated immigration reform and an ever-expanding Hispanic migrant populace living within the United States, it is increasingly necessary for medical examiners' offices throughout the country to become familiar with the biological and sociocultural characteristics of undocumented migrant remains. The biocultural profile of undocumented migrants is broadly applicable and can apply to individuals who have been living within the United States as an undocumented and marginalized community.

#### References:

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## Physical Anthropology Section - 2014

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2. Birkby WH, Fenton TW, Anderson BE. Identifying southwest Hispanics using nonmetric traits and the cultural profile. *J Forensic Sci* 2008;53(1):29-33.
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  4. Hughes CE, Tise ML, Trammel LH, Anderson BE. Cranial morphological variation among contemporary Mexicans: regional trends, ancestral affinities, and genetic comparisons. *Am J Phys Anthropol* 2013;151:506-517.
  5. Anderson BE, Smith TW, Birkby WH, Fenton TW, Hurst CV, Gordon CC. Differentiation between foreign national Hispanics and U.S. Hispanics in the southwest: the influence of socioeconomic status on dental health and stature. *P Am Acad Forensic Sci* 2009.
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### **Forensic Anthropology, Biocultural Profile, Undocumented Migrants**