



# Physical Anthropology Section – 2011

## H20 Development of the Colombian Skeletal Collection

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After attending this presentation, attendees will gain knowledge of the development of the Colombian Skeletal Collection, including the administrative and technical logistics behind its assembly, the antemortem information available, and the goals of research projects.

This presentation will impact the forensic science community by detailing the creation of a new modern skeletal collection in Colombia available for research with the goal of aiding in the identification process of victims of the Colombian conflict.

During the past two decades Colombia has been faced with socio-political problems which have led to innumerable violent situations, resulting in the deaths and disappearances of thousands of individuals. Many of the recovered individuals are skeletons from clandestine graves located all over the country. Once excavated and sent to the forensic laboratories, analysis is done by forensic anthropologists, dentists, and pathologists who must determine who each individual was and whether or not they died in a violent context.

As the majority of recovered individuals remain unidentified, it is necessary to develop a way to augment the ability to answer several questions, including positive identification and cause and manner of death. Due to the above, a research collection of modern skeletons is currently being organized in Colombia. The Colombian Skeletal Collection is being assembled for several reasons: (1) to develop standards and validation studies (for age-at-death, sex, stature, etc.) from the Colombian population because best practice states that standards developed from one population should only be applied to that particular population; (2) at this point, there are very few forensic anthropology-related population studies that have been done in Colombia, and therefore, the standards used to analyze forensic cases here are those based on American and European populations; and, (3) to allow for the generation of scientific knowledge with regards to physical/forensic anthropology for Colombia and to enable research to move forward here

in the areas of physical/forensic anthropology, dental anthropology, radiology, osteopathology and taphonomy, among others.

In order to assemble the collection, an inter-institutional agreement was entered into between the National Institute of Legal Medicine and Forensic Sciences and the Public Services Administrative Unit, the entity which administers the cemeteries within Bogotá. The agreement states that instead of being placed into collective ossuaries, bodies not claimed by relatives once a four-year single burial period has lapsed will be donated to the Institute of Legal Medicine for the purpose of scientific investigations.

The first phase of the project has a five-year duration (2009-2013) and will be renewed in 2013 if both parties agree. The goal for Phase 1 is to assemble a collection of 600 individuals. Since 2009, 100 skeletons have been prepared for the collection (native-born Colombians, males and females aged 18-65, birth years 1940-1987, death year 2005). Skeletons are in good to excellent condition.

A large amount of antemortem information is available for each individual in the collection and is being placed in a searchable database. This information includes date of birth, place of birth, sex, stature, date of death, and cause and manner of death. In the instances where the individual died while under a doctor's care, the medical records that show the evolution of the patient's treatment are available. Likewise, when an autopsy was performed, this report is also available with postmortem photographs of the individual's face. Furthermore, information from each cemetery regarding where each person was buried (e.g., in a coffin in the ground or in a mausoleum); climate of the area where the cemetery is located; type of coffin or burial container; and the photograph of the individual at the time of exhumation is available as well.

The collection will be available for research once 150-200 individual skeletons have been prepared, which is anticipated within a year. The requirement for researchers will be that a project proposal be presented to and approved by the Division of Scientific Investigation of the National Institute of Legal Medicine and Forensic Sciences in Bogotá.

In addition to being the first of its kind in South America, the Colombian Skeletal Collection will rival other similar modern skeletal collections in terms of available antemortem information alone. This will greatly contribute to both the utility and variety of the research questions that will be investigated.

**Colombia, Skeletal Collection, Modern Population**