



Physical Anthropology Section – 2006

H72 Trace Element Analysis of Medical School Cadaver Cremains

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After attending this presentation, attendees will learn how the identification and concentration (mg/kg) of trace elements in human cremains can determine whether the cremains are legitimate or have been contaminated with non-human "filler." This technique is being developed to provide a new scientific methodology to assist in crematory/funeral home litigation.

This presentation will impact the forensic community and/or humanity by demonstrating the utility of trace elemental analysis in the examination of cremated remains.

Complete powderization of cremated bone fragments is becoming the standard among professional crematories, leaving no identifiable bone fragments for the forensic anthropologist to analyze. At present, the current methodology used in forensic anthropology to analyze human cremated remains (cremains) lacks the ability to identify scientifically the powderized portion of the cremains set. A critical question in the Tri-State Crematory Incident, Noble, GA, USA, revolved around the powderized portion of cremains. Was it human ash or non-human "filler?" Because of this past incident, and so forensic scientists are prepared for future litigation, an empirical method to determine if the powderized ashes are human or not must be developed. Attendees will independently test this technique to verify or refute the findings.

Cremains, Trace Elements, Forensic Anthropology