

**MA Thesis – Human Skeletal Biology Track, Physical Anthropology – New York University
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**ANALYSIS OF POPULATION STRUCTURE USING THE 13 CORE CODIS LOCI IN 4
SAMPLE POPULATIONS: U.S. CAUCASIAN, AFRICAN AMERICAN, HISPANIC,
AND JAMAICAN**

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Abstract

This paper reviews the background behind, and resolution of, the fierce debate in the late 1980s and early 1990s regarding the impact of population substructure on forensic uses of DNA fingerprinting. Development of the FBI's 13 core CODIS loci is then discussed. Samples from 4 populations – African Americans, Caucasian Americans, Hispanics from the U.S. Southwest, and Jamaicans – that have been genotyped for the 13 CODIS loci are then analyzed to determine what structure is present in the data and whether the populations can be reliably distinguished from one another using the program STRUCTURE.