

Biography of Dr. Michael D. Coble

Michael D. Coble received his Master's degree in Forensic Science in 1997 and Ph.D. in Genetics from the George Washington University in 2004. Dr. Coble conducted his thesis research at the Armed Forces DNA Identification Laboratory (AFDIL). After completing his Ph.D., Dr. Coble worked as a National Research Council Post-Doctoral Fellow with the human identity project team at the National Institute of Standards and Technology where he worked on a set of novel miniSTR markers for analyzing degraded nuclear DNA. Three of the markers characterized by Dr. Coble at NIST will be incorporated in the next generation multiplex (NGM) STR kits to be used in Europe. In 2006, Dr. Coble returned to AFDIL to direct the research section. During his tenure at AFDIL, Dr. Coble's section was instrumental in resolving a number of high profile historical cases including the identification of the two missing Romanov children – Alexei and one of sisters. In 2010, Dr. Coble returned to NIST to conduct research in forensic DNA testing and clinical genetics.

Honors/Awards

2004 – National Research Council Post-Doctoral Fellowship, National Institute of Standards and Technology.

2005 – John Hill Brinton Award from the Armed Forces Institutes of Pathology for most outstanding scientific publication.

2007 – Invited member of the DNA Commission of the International Society for Forensic Genetics to revise the recommended guidelines for mitochondrial DNA typing.

2009 – Washington Academy of Sciences Award for Merit and Distinction in the Biological Sciences.

Memberships and Committees

American Society of Human Genetics

International Society of Forensic Genetics

Mid-Atlantic Association of Forensic Scientists (Chair of the Membership Committee)

Washington Academy of Sciences

Selected Publications

Coble MD, Loreille OM, Wadhams MJ, Edson SM, Maynard K, Meyer CE, Niederstätter H, Berger C, Berger B, Falsetti AB, Gill P, Parson W, and Finelli LN (2009) "Mystery solved: the identification of the two missing Romanov children using DNA analysis." PLoS ONE, 4(3): e4838.

Hill CR, Kline MC, Coble MD, and Butler JM (2008) "Characterization of 26 miniSTR loci for improved analysis of degraded DNA samples." Journal of Forensic Science, 53(1): 73-80.

Achilli A, Perego UA, Bravi CM, Coble MD, Kong Q-P, Woodward SR, Salas A, Torroni A, and Bandelt H-J (2008) "The Phylogeny of the Four Pan-American MtDNA Haplogroups: Implications for Evolutionary and Disease Studies." PLoS ONE, 3(3): e1764.

Butler JM, Coble MD, and Vallone PM (2007) "STRs vs SNPs: thoughts on the future of forensic DNA testing." Forensic Science, Medicine and Pathology. 3: 200-205.

Irwin JA, Saunier JL, Strouss KM, Sturk KA, Diegoli TM, Just RS, Coble MD, Parson W, and Parsons TJ (2007) "Development and expansion of high-quality control region databases to improve forensic mtDNA evidence interpretation" *FSI Genetics*, 1(2): 154-157.

Vallone PM, Jakupciak JP, and Coble MD (2007) "Forensic application of the Affymetrix human mitochondrial resequencing array. *FSI Genetics*, 1(2): 196-198.

Coble MD, Vallone, PM, Just, RS, Diegoli, TM, Smith, BC, and Parsons, TJ (2006) "Effective strategies for forensic analysis in the mitochondrial DNA coding region." *Int. J. Legal Med.* 120(1): 27-32.

Coble MD and Butler JM. (2005) "Characterization of new miniSTR loci to aid analysis of degraded DNA." *Journal of Forensic Science.* (50)1: 43-53.

Coble MD, Just RS, O'Callaghan JE, Letmanyi IH, Peterson CT, Irwin JA, Parsons TJ. (2004). "Single nucleotide polymorphisms over the entire mtDNA genome that increase the power of forensic testing in Caucasians." *Int. J. Legal Med.* 118: 137-146.