

Christina Bergey

Advisor: Prof. Todd Disotell

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Department of Anthropology

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An Investigation of Maternal Relatedness in Four Groups of Wild Blue Monkeys

*(Cercopithecus mitis stuhlmanni)*

[Previously: Maternal Relatedness and Its Implications for Cooperative Behavior in

*Cercopithecus mitis*]

Abstract:

*A large population ( $N > 48$ ) of female blue monkeys and offspring (*Cercopithecus mitis stuhlmanni*) was investigated and found to have little to no variation in the d-loop or control region of their mitochondrial DNA. The results concur with both historic data (which suggest a large group fragmented and expanded to form the modern four-group study population), as well as with the blue monkey social system (which includes female philopatry and male dispersal). The author posits that historical or stochastic events are the cause of the low variation found in maternally-inherited mitochondrial DNA. A species-wide sampling of d-loop sequence would be necessary to determine if such little genetic diversity is the norm or an aberration among blue monkeys.*