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Adam J Zarn* (adam.zarn@my.wheaton.edu), **Elliott Z Hollifield** (ehollifi@unca.edu) and **Victoria A Trevino** (trevino.victoria@yahoo.com). *A Survival Analysis of the Duration of Olympic Records.*

We use recurrent-events survival analysis techniques and methods to analyze the duration of Olympic records. The Kaplan-Meier estimator is used to perform preliminary tests and recurrent event survivor function estimators proposed by Wang & Chang (1999) and Pena et al. (2001) are used to estimate survival curves. Extensions of the Cox Proportional Hazards model are employed as well as a discrete-time logistic model for repeated events to estimate models and quantify parameter significance. The logistic model was the best fit to the data according to the Akaike Information Criterion (AIC). We discuss, in detail, covariate significance for this model and also predict that roughly 20 to 30 records, of the 51 relevant events considered, will be broken in the 2012 Olympic Games in London. (Received August 02, 2012)