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Maria E Calzada and **Holly M Gardner*** (hgardner.nola@gmail.com), 6320 Caldwell Drive, New Orleans, LA 70122. *Preliminary Report on the Power of the Bootstrap Ratio Test for Normality.*

Based off of the results obtained from a simulation study done during the 2009 SCORE program, a new normality test, the Bootstrap Ratio Test, was developed using ratios calculated from bootstrap t confidence intervals. These ratios are compared with critical values computed from Monte Carlo simulation constructed with sample sizes 4 to 45; for confidence levels 0.9, 0.95, and 0.99; for significance levels of 0.1, 0.05, and 0.01; and for 1000 or 2000 bootstrap resamples. A power study is being completed comparing the performance of the Bootstrap Ratio test to the Anderson-Darling, Lilliefors, Shapiro-Wilks normality tests for symmetric and skewed distributions. Preliminary results show that the Bootstrap Ratio Test performs comparably well to the established tests for skewed data. Extended results will be available on the date of presentation. (Received September 19, 2010)