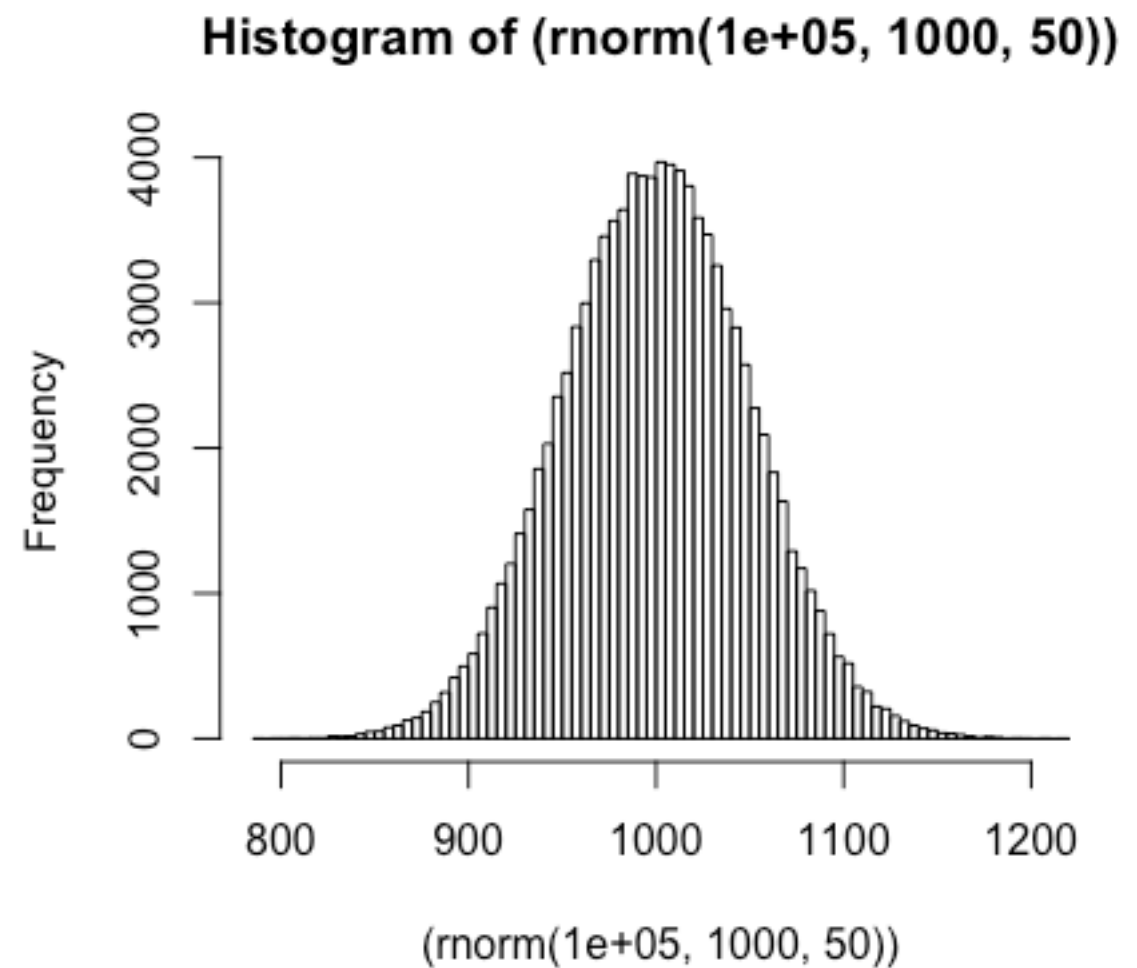# A Brief Reminder of the Assumptions of Parametric Tests

- Assumption 1 - the data are conditionally normally distributed - in practical terms, this means the *residuals* need to be normally distributed (although t-tests require the data to be normal too).

Histogram of (rnorm(1e+05, 1000, 50))

(rnorm(1e+05, 1000, 50))

- Assumption 2 – Homogeneity of variance – the variances should not change systematically throughout the data. In designs where you test several groups of participants this means that the variances of each group should be equivalent.

- Levene's Test for equality of variance. If it is non-significant, then it means that the variances are equivalent (i.e., we have homogeneity of variance).