

Introduction to Scientific Computing for Biologists

ISCB20.09 - Interpreting Data with Inferential Statistics using R

Md. Jubayer Hossain
<https://jhossain.me/>
jubayer@hdrobd.org

Founder
Health Data Research Organization
Lead Organizer
Scientific Computing for Biologists

09 February 2021

Normality Tests

- ▶ Shapiro-Wilk Test
- ▶ D'Agostino's K^2 Test
- ▶ Anderson-Darling Test

Correlation Tests

- ▶ Pearson's Correlation Coefficient
- ▶ Spearman's Rank Correlation
- ▶ Kendall's Rank Correlation
- ▶ Chi-Squared Test

Parametric Statistical Hypothesis Tests

- ▶ Student's t-test
- ▶ Paired Student's t-test
- ▶ Analysis of Variance Test (ANOVA)
- ▶ Repeated Measures ANOVA Test

Nonparametric Statistical Hypothesis Tests

- ▶ Mann-Whitney U Test
- ▶ Wilcoxon Signed-Rank Test
- ▶ Kruskal-Wallis H Test
- ▶ Friedman Test