

STATISTICAL ANALYSIS OF RESEARCH DATA

in Natcher Conference Center

is sponsored by the NCI Center for Cancer Research, Office of Training and Education.

The lecturer is Dr. Paul Thurman of Columbia University (Paul.Thurman@Columbia.edu).

AGENDA

Mar 6, 2024 Univariate Data Analysis

- 9:00 a.m. • Introduction and case overview (including review of first assignment)
 • Descriptive Statistics
 • Data/probability distributions (with focus on Normal)
 • Sampling distributions (mean and variance)
- 10:30 a.m. Break
- 10:45 a.m. • Sampling distributions (mean and variance, continued)
- 12:00 noon Lunch Break
- 1:00 p.m. • Small vs. large samples
 • One-sample inferential statistics: means, variances, confidence intervals
- 3:00 p.m. Break
- 3:15 p.m. • Two-sample inferential stats: two-sample t-tests (paired vs.
 independent; means and proportions)
- Tutorials: Excel tutorials on descriptive statistics, histograms, two-sample tests*
- 5:00 p.m. Bivariate statistics (covariance, correlation, etc.); latest end by 5:30 p.m.

Mar 7, 2024 Bivariate Data Analysis

- 9:00 a.m. • Simple linear regression
- 10:30 a.m. Break
- 10:45 a.m. • Multiple linear regression
- 12:00 noon Lunch Break
- 1:00 p.m. • Multiple linear regression (continued)
- 2:00 p.m. Break (if needed)
- 2:15 p.m. • Non-parametric tools: Chi-squared, Wilcoxon, Mann-Whitney goodness
 of fit tests (as time permits)
- Tutorials: Regression, Chi-Squared, and ANOVA tests (as time permits)*
- 4:30 p.m. Close

For additional information contact the Course Coordinator, Dr. Terry
Moody (moodyt@mail.nih.gov).