

Medical Student Research Program Statistics Course

- **Time commitment:** 2 hour or less lecture time weekly for a minimum 8 weeks.
- **When:** Wednesdays at noon, starting with an introduction meeting on May 25th finishing on July 13th
- **Outcomes:** Required exercise completion.
 - 1) Downloading JMP 16 PRO onto workstation/computer
 - 2) Appropriate use and transformation in Excel to arrange a dataset for analysis using Index (Match ()), and if () commands, and other logic commands to rearrange and transform data to prepare for analysis.
 - 3) Understanding of variable types including continuous, nominal, and ordinal data.
 - 4) Appropriate selection of inferential test whether that is student's t-test vs Wilcoxon rank sums for continuous data, or Chi-squared testing vs Fisher Exact test for tests of proportions using JMP or other statistical software
 - 5) Creation of publication quality data table (using sample class data or their own) using JMP or other statistical software
 - 6) Creation of publication quality histogram, box plot, violin plot, or other graphical plot using JMP or other statistical software
 - 7) Completion of course with mandatory end of course survey
- **Attendance Requirements:** One absence will be permitted, notify instructor prior to the date and student is responsible for any makeup work
- Email Benjamin.Kaffenberger@osumc.edu with any questions