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 25\textsuperscript{th} finishing on July 13\textsuperscript{th}

- **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