## P211 Lab Homework Assignment #9: Correlation Results Due before the beginning of your lab section the week of Nov 4<sup>th</sup>.

## Goals:

- To practice analyzing correlational data
- To review the format and details involved with writing a results section
- To gain more experience interpreting results and developing a discussion section

## Instructions:

- 1) Write a formal results section for a scientific article about amyloid beta plaques and Alzheimer's disease symptomatology using the <u>Correlation Resampling Applet</u> and the data set provided. Be sure to include the results of the following hypothesized relationships:
  - Navigational Ability and Hippocampus Plaque Density
  - Navigational Ability and Temporal Plaque Density
  - Memory and Hippocampus Plaque Density
  - Memory and Temporal Plaque Density

Also select one other comparison (correlation) to include. This extra correlation should not be one of the example correlations you worked on in lab this week. All together your results section should report five different results with figures of scatterplots for each analysis. Follow the model you've observed in the scientific papers you've been reading. Remember that the results section should report the scientific findings using clear and concise language and organization and each result should be presented in standard APA format. Save all interpretation of the results for the discussion section.

2) Write a partial discussion section in which you comment on your results in the context of Alzheimer's disease. You should include a summary of your findings and comment on the issue of correlation vs. causation. You should make use of the literature review you did last week to offer a short explanation of what your results do and do not tell us about Alzheimer's disease. This does not need to be a complete discussion section. You do not need to address confounds, future work, or write a summary/conclusion, but your write up should summarize your findings and draw a more general conclusion about the relationship between plaques and the disease. It is anticipated that your discussion section will be in the neighborhood of one to two pages long.

You can answer these questions in a new Word document, or you can use the Word template attached to this assignment if you'd like. Remember that all answers must be written in your own words and may not be taken directly from articles or other sources.