**Tutorials for HS Students**

1. [**https://www.youtube.com/watch?v=jxUiIFj2l-s**](https://www.youtube.com/watch?v=jxUiIFj2l-s) **(8 min)**
2. [**https://www.datacamp.com/courses/correlation-and-regression**](https://www.datacamp.com/courses/correlation-and-regression)
3. **Read in the expression data matrix and clinical data into rstudio server**
4. [**https://www.youtube.com/watch?v=tlf6wYJrwKY**](https://www.youtube.com/watch?v=tlf6wYJrwKY) **(18 min)**
5. [**http://www.sthda.com/english/wiki/visualize-correlation-matrix-using-correlogram**](http://www.sthda.com/english/wiki/visualize-correlation-matrix-using-correlogram)
6. [**https://cran.r-project.org/web/packages/corrplot/vignettes/corrplot-intro.html**](https://cran.r-project.org/web/packages/corrplot/vignettes/corrplot-intro.html)

**Questions**

1. **Define Correlation. Please cite any reference you may use. This can be as simple as copy and pasting a URL.**
2. **What is a correlation matrix? Why is the diagonal on the correlation matrix always 1.0? Please cite any reference you may use.**
3. **Would you expect the down-syndrome (DS) AMLs to correlate more to other DS-AMLs or to the other M7 (megakaryocytic) AMLs? Why?**
4. **Define megakaryocytic AML. Please cite any reference you may use.**