**Applied Regression (part 2) Assignment**

This (voluntary) assignment is geared toward helping reinforce what was discussed in the Brown Bag. Using the gapminder dataset (need the gapminder library), try to complete the following items:

1. Run a model that looks at the relationship between *log10(lifeExp)* and *log10(gdpPercap)* with lifeExp being the dependent variable.
2. Run a model that builds upon the first one by including the variable *continent*.
3. Evaluate which model performs better.
4. Interpret the models (statistical significance, influence of significant variables).
5. Check the following assumptions:
   1. Normality
   2. Constant Error Variance
   3. Error Independence
   4. Multicollinearity
   5. Conditional Expected Value for the Errors is 0
6. List which (if any) assumptions are violated. Try to come up with a reason why the assumption may be violated.
7. Create a table or coefficient plot to showcase the model results.
8. Create plots to show the influence of statistically significant variables.

As always, feel free to reach out to someone on the research team if assistance would be helpful.