

## Week 4 Discussion

Material covered: McElreath Chapter 4 and video lecture 4.

[Here are some instructions](#) for Yellowdig as well as the description of the point system.

1. What are normal distributions so common in statistics? What are some potential problems with using the normal distribution? (4.1)
2. Is looking at the raw data a good way to determine if the data are normally distributed? Why or why not? (4.3.2)
3. What does iid mean? Is it an important assumption? When is it likely or unlikely to be true? (4.3.2)
4. Is  $\mu_i = \alpha * \exp(-\beta * x_i)$  a regression model? A linear model? Please explain. (4.4)
5. What is the correct prior? How do we choose a correct prior? (4.4)
6. What is a linear model in the context of statistics? (4.5)
7. Please post on any aspect of the chapter that you found interesting, insightful, or confusing.