Homework 8

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# Question 1:

For your own dataset (or data from Dryad; whichever you have used for previous “bring your own data” questions):

1. Fit models with multiple covariates using map2stan. Include your code in your response.
2. Select the best fit model between at least two models with different covariates using WAIC (for details, see Chapter 6 of McElreath).

# Question 2:

Fit a model for one of the following data competitions:

1. <https://www.drivendata.org/competitions/51/electricity-prediction-machine-learning/>
2. <https://www.drivendata.org/competitions/2/warm-up-predict-blood-donations/>
3. <https://www.drivendata.org/competitions/1/united-nations-millennium-development-goals/page/2/>

Compare the predictive accuracy of your fitted model with the accuracy of your online competitors. Note: the problem with a cash prize (#1) is harder than problems #1 and #2, which do not have an associated prize. Feel free to use whatever statistical technique you see appropriate.

(note: if you do win the €23,000 cash prize, it would be nice if you bought lunch for the class)

# Question 3:

Complete problems 6H1-6H3 on page 207 of Richard McElreath’s text. Please note that a detailed description of all the knowledge required to fit these problems is in Chapter 6 of McElreath.