# Methods in Experimental Ecology II (PCB 6468) Exercise 2 - Averages <br> Due January 29, 2016 

Using the script Averages in Jags.R, calculate for $\mathbf{1 0}$ sets of samples of $\mathbf{1 0}$ random individuals:

1. Mean height using frequentist estimates.
2. Mean height using Bayesian estimates with uninformed priors.
3. Mean height using Bayesian estimates with the same informed priors as shown in class.
4. Obtain the confidence and credibility intervals of each
 estimate.
5. Repeat steps $\mathbf{1 - 4}$ using $\mathbf{1 0}$ set of samples of $\mathbf{1 0 0}$ random individuals.
6. Present and plot all your results in an informative way.
7. Discuss the differences between approaches with small and large sample sizes.

NOTE1: Remember to use the same data to compare approaches for each set, but to change it between sets.

NOTE2: Please submit your paper as a single word document. Remember to include your raw data and all the appropriate R code as appendices at the end.

