

## Exercise 5.4 MCMC Extensions

*Instructions:* You may discuss this assignment with other students in the class, but you must submit your own answers to the questions below. Include an honor pledge with your submission. Submit online and in PDF. This exercise is ungraded.

1. Evaluate the answer provided by MCMC as shown in the video to the problem of estimating tumor formation in rats.
2. Explain the advantages and disadvantages of Hamiltonian Monte Carlo and Sequential Monte Carlo versus Metropolis-Hastings Monte Carlo.