Group 2: Project 2
Presentation date: February 25

1) Implement the gain-loss Q-learning model described in Frank et al. (2007), and show that it can account for behavioral performance, as well as neurogenetic effects, in the probabilistic selection task.

2) Show that the model accounts for the effects of dopaminergic medication as described in Frank et al. (2004).

3) How does the abstract Q-learning model relate to the biologically detailed model presented in Frank et al. (2004)?

References:

Frank, M.J., Seeberg, L.C., & O'Reilly, R.C. (2004). By carrot or by stick: cognitive reinforcement learning in Parkinsonism. *Science, 306,* 1940-1943.

Frank, M.J., Moustafa, A.A., Haughey, H.M., Curran, T., & Hutchison, K.E. (2007). Genetic triple dissociation reveals multiple roles for dopamine in reinforcement learning. *Proceedings of the National Academy of Sciences, 104,* 16311-16316.