

Discussion Questions
Cooperation Competition and Hierarchy in Baboons

READ:

Sapolsky (1990) Stress in the Wild. Scientific American Vol.262(1), p.106-113

Tung et al (2012) Social environment is associated with gene regulatory variation in the rhesus macaque immune system. PNAS 109:6490-6495.

Prepare answers to the following questions.

Students are encouraged to work together and discuss these questions but answers should be prepared individually.

Bring you answers to class **typed** but be prepared to discuss and amend your responses before handing them in.

- 1)** Make a list of any terms or techniques that were not familiar to you as you read Tung et al 2012. Attempt to learn at least 3 of these. Briefly describe your new knowledge and be prepared to share it in class.

 - 2)** In your own words explain the general approach and take away message for **just one** of the figures in Tung et al 2012 (try to understand the others but be prepared to work through one for the class).

 - 3)** We have seen many examples this semester of social environment influencing animal behavior (e.g. Alternative reproductive tactics, mate choice, maternal care, apparent altruistic behavior etc.). Choose one of these instances and think about how you would study how gene expression mediates this influence.
 - What would be your experimental conditions?
 - What would you need to use as controls?
 - Explain your selection of experimental organism.
 - What behavioral measures would you make?
-