Lab 1 Introduction: Bio 656 Multilevel Models

First, we will ensure that you have the appropriate functions in STATA for this course. You need to have:
- **xtmixed**
- **gllamm**

xtmixed

The command `xtmixed`, available in STATA 9.0 and above, fits linear (Gaussian) mixed models. You do not have to download `xtmixed` because it should already be included in your (newer) version of STATA. However, take note of the helpful hint below.

> *Helpful hint:*
> If, after updating your version of STATA, you have problems when you run `xtmixed` (i.e., an error message like `_xtm_setup() not found`) type the command
> `update swap`
> When STATA starts up again, `xtmixed` should work.

gllamm

The STATA program `gllamm` is used to estimate **G**eneralized **L**inear **L**atent **A**nd **M**ixed **M**odels. The function `gllamm` can handle responses that are continuous, counts, duration/survival data, dichotomous, ordered and unordered categorical responses and rankings. Note that `gllamm` is not recommended in most cases for models with only continuous outcomes because `xtmixed` is computationally more efficient. For more information on `gllamm`, go to the website: http://www.gllamm.org or go to the 'software' page on our course website and check out the `gllamm` manual .pdf.

> *Installation of* **gllamm***:*
> To check if you already have `gllaam` installed, type
> `which gllaam`
> If you get a message like
> `command gllamm not found as either built-in or`
> `ado-file`
> Then you should install `gllamm`.
> Make sure you are connected to the internet, then type
> `ssc install gllamm`
> If you already have `gllamm` installed, **update** your version with
> `ssc install gllamm, replace`