

Analysis of Longitudinal Data
Biostatistics 140.655

SAS Macros for use with Longitudinal Data

```
gee1_203.sas* - fits gee models  
  
geefit.sas** - demonstrates using gee1_203.sas for continuous outcomes  
  
geefit2.sas** - demonstrates using gee1_203.sas for binary outcomes  
  
glmm612.sas* - GLMMIX macro fitting generalized linear mixed models  
using PROC MIX  
  
mixfit.sas** - demonstrates using GLMMIX for binary outcomes  
  
rdffit1.sas** - fits linear mixed effects model using PROC MIX  
  
splnfit.sas** - fits four linear regression models with cubic splines and up to  
four knots  
  
twstgfit.sas** - fit two-stage regression model  
  
gendat.sas** - generate correlated data to compare OLS, WLS  
owlsfit.sas** - fits OLS, WLS models on gendat.sas data  
  
* actual SAS macros  
  
** merely demonstrates use of either macros contained here or standard SAS  
procedural syntax
```

Stata:

```
gendat.do - generate correlated data to compare OLS, WLS  
autocor.ado - calculates and plots autocorrelation function  
twostage.ado - fits twostage regression models
```

S-Plus:

```
gendat.spl - generate correlated data to compare OLS, WLS  
owlsfit.spl - fits OLS, WLS models on gendat.spl data
```

