

# BIOS 750: Monte Carlo and Bootstrapping

Class project

## Working Problem for Class

Missing data are a major issue for most longitudinal studies.

There are a number of imputation methods that have been suggested for longitudinal studies.

One of these is the “last observation carried forward” method (LOCF).

Issue: it's a bad method and there are better ones available, but clinicians don't seem to get it.

## Example: Longitudinal Study

The study is an intervention comparing one treatment to a “standard of care” control group.

Subjects are measured at baseline, 3 months, 6 months, and 12 months.

sub	group	0	3	6	12
1	1	$y_{11}$	$y_{12}$	$y_{13}$	$y_{14}$
2	1	$y_{21}$	$y_{22}$	$y_{23}$	$y_{24}$
...					