

## ***Biostatistics* Week 3 Agenda:**

### **Readings:**

- **Zar Chapter 6** – The Normal Distribution
- **Zar Chapter 7** – One-Sample Hypotheses
- ***Biostatistics 100*** – Repeated Sampling
- ***Biostatistics 110*** – Formal Logic of Statistical Tests
- ***Biostatistics 120*** – One Sample t-Test
- ***Biostatistics 130*** – Power & Sample Size
- ***Biostatistics 140*** – One-Sample Test of Variance
- ***Biostatistics 150*** – Paired t-Test

### **To do:**

- **Begin Portfolio:**

### **To know:**

Population vs Sample parameters

Point estimates

Sample error of parameters such as the mean

Test statistic

Confidence intervals for the mean

Sampling distributions

Null vs Alternative hypotheses

One-sided vs Two-sided tests

Critical value vs Probability of a test

Decision rule

One-sample t-test

Power and sample size estimations

One-sample  $\chi^2$  test of variance

Paired-sample design

Paired t-test