# Stat 10, Section 1A Thursday, April 8th, 2010

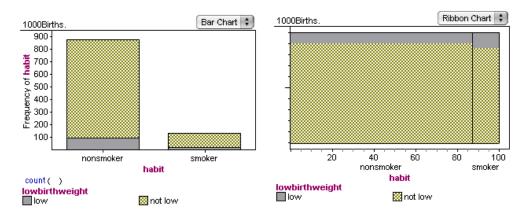
### David Diez

If you did not receive my email on Monday (April 5th), please email me (david@stat.ucla.edu).

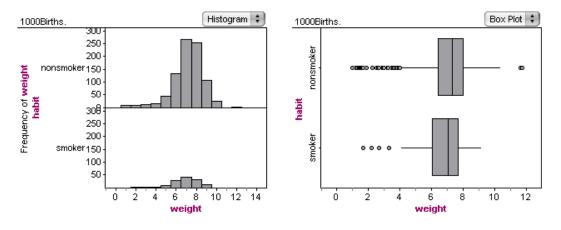
## 1 Lab 1 discussion

#### A few comments:

- Be cautious about saying one variable affects another, which is "causal speak". This was an observational study.
- Comparison of two plots:



• Comparison of another pair:



#### 2 Lab 2 discussion

The primary idea of the lab is that there are two possibilities: either the drug worked or it didn't work (i.e. outcome and treatment are independent). We use our simulations to evaluate whether the data convincingly shows streptomycin works.

## 3 Handout, which is posted on Moodle

## 4 Quiz problems

We discussed the following quiz problems from Quiz 1:

- (2) A recent housing survey was conducted to determine the price of a typical home in Glendale, CA. Glendale is mostly middle-class, with one very expensive suburb. The mean price of a house was roughly \$650,000. Which of the following statements is most likely to be true?
  - (a) Most houses in Glendale cost more than \$650,000.
  - (b) Most houses in Glendale cost less than \$650,000.
  - (c) There are about as many houses in Glendale that cost more than \$650,000 than less than this amount.
  - (d) We need to know the standard deviation to answer this question.
- (4) We are given the following table for tuition data on public/private medical schools:

	Min	Q1	Median	Q3	Max
Private	\$6,550	\$30,729	\$33,850	\$36,685	\$41,360
Public	\$0	\$10,219	\$16,168	\$18,800	\$27,886

Determine which of the following statements is true about the spread for Medical School resident tuition.

- (a) There is the same variation for resident tuition for residents at private medical schools and for resident tuition at public medical schools since the ranges are almost equal.
- (b) There is more variation for resident tuition for residents at public medical schools than for resident tuition at private medical schools since the interquartile range is wider for public schools.
- (c) There is the more variation for resident tuition for residents at private medical schools than for resident tuition at public medical schools since there are outliers for private schools.
- (d) With these data, we cannot determine the variation for tuition for residents at private and public medical colleges.