

**Advanced Methods In Biostatistics IV – Reading Assignment 4**  
**Due: April 26<sup>th</sup> 10:30AM**

**Read the paper by Liang and Zeger (1986) available from the class website**

**Briefly Answer Each of These Questions:**

- (1) Why do you think it took from 1974 to 1986 before people adopted a quasi-likelihood type estimating equation approach for longitudinal data?
- (2) There are two major theorems used in the proof of Theorem 2. What are they?
- (3) Can you think of an example where the exchangeable working correlation matrix would be a good choice? How about the AR1 working correlation? Can you think of another working correlation matrix that might be useful other than independence/AR1/exchangeable?