

Name: \_\_\_\_\_

Dr. Reichler's Bio 325-uex Spring 2009 Quiz 2/19

- 1) What are some caveats about using twin studies to determine the nature/nurture component of a trait?
- 2) If fraternal and identical twins that grew up together and fraternal and identical twins who grew up apart both had a 77% correlation in whether they liked to chew gum, what conclusion could be reached?
- 3) What did the study looking at *in vitro* fertilizations find about the affects of smoking on fetuses?
- 4) Based on the evidence from voles, what might you do to your significant other if you wanted to break up with them?

Answers:

- 1) Only a few twins separated at birth have been studied, so the sample number is low. The environments that the separated twins lived in were generally not radically different, thereby masking some of the affects of differing environments.
- 2) Chewing gum preference is based on what happens in the womb. The only commonality between these twins is that they all share a womb with their twin.
- 3) Smoke exposure caused the differences in birth weight, but the correlation of anti-social behavior in children exposed to fetal smoke was actually a strongly genetic affect.
- 4) Inject them with oxytocin receptor blockers.