

1035-B1-1129

**Raina S. Robeva\*** (robeva@sbcc.edu), Department of Mathematical Sciences, Sweet Briar College, Sweet Briar, VA 24595. *Inspiring Examples from Biology for Teaching Limit Theorems in Probability.*

We discuss how some important biological experiments can be used to motivate the study and understanding of limit theorems in probability. The biological examples include the Nilsson - Ehle experiments with wheat from the turn of the 20th century, the Luria-Delbruck studies from the 1940s on mutations of bacteria from virus sensitivity to virus resistance, and others. The corresponding mathematical concepts of interest include the law of large numbers, the Poisson approximation to the binomial distribution, and the Moivre-Laplace limit theorem. (Received September 18, 2007)