

Title: Testing predictions from formal models of social learning: When should animals increase use of socially acquired information?

Abstract: My students and I have found that after a naïve rat (an observer) interacts with a conspecific (a demonstrator) that has recently eaten a food unfamiliar to the observer, the observer will exhibit a significant enhancement of its preference for whatever food its demonstrator ate. In recent studies, we have used methods developed to study such olfactory communication about foods among rats to explore effects on social learning of variables that formal models predict should increase animals' reliance on information that they have acquired from conspecifics. In particular, I shall discuss the effects on use of socially acquired information of: (1) difficulty in learning for oneself by trial and error, (2) dissatisfaction with the current environment, (3) uncertainty and, (4) increased costs of individual learning.