BIOLOGY SEMINAR UNCOMMON LEADERS LECTURE

4:00 PM TUESDAY Physics Astronomy A102 3:45 Coffee, Tea & Cookies P-A A102 Adult Refreshments Follow in P-A A044F (graduate student lounge)

Tuesday, November 8, 2005

"Evolutionary Aspects of Gender and Sexuality"



Dr. Joan Roughgarden Professor of Biological Sciences and of Geophysics Stanford University

http://www.stanford.edu/group/rou ghlab/rough.html

The biological theory of gender traces to Darwin's writings on "sexual selection" in 1871. He wrote that "males of almost all animals have stronger passions than females" and that "the female... with the rarest of exceptions is less eager than the male... she is coy." Darwin imagined that male characteristics evolve because females select mates who are "more attractive... vigorous and well-armed," just as "man can give beauty... to his male poultry" through selective breeding. This biological theory of universal gender norms now appears both false and unfixable.

I have proposed social-selection theory as a replacement for sexual-selection theory. According to social selection, reproductive social behavior is cooperative, organisms bargain and trade direct ecological benefits to maximize number of young reared, and reproductive groups (families) are coalitions of pre-zygotic and post-zygotic helpers. Also, natural selection selects for "social-inclusionary" traits of two types: cooperation facilitators that involve physical-intimacy to coordinate play and to discern group fitness, and admission tickets to resource-controlling clique that have previously been interpreted as secondary sexual characters. The theory of social selection may be expressed mathematically using cooperative game theory.

Host: Billie Swalla

For more information see: http://www.biology.washington.edu/bio2/news/seminars/ To request disability accommodations, contact the Disability Services Office at least 10 days in advance of the event. 543-6450 (voice); 543-6452 (TTY); 685-7264 (FAX); dso@u.washington.edu (e-mail)