

Patricia Adair Gowaty

Dr. Gowaty is a Distinguished Professor at UCLA and a Distinguished Research Professor *Emerita* at the University of Georgia. She is a nationally and internationally known evolutionary biologist who studies the evolution of social behavior in ecological, life-history, and demographic contexts (mating theory, mating systems, extra-pair paternity, female-female aggression, intersexual conflict, offspring viability selection, the theory of reproductive compensation, chance effects on sex-differentiated behavior, and the origins of sex-differentiated behavior).

Her 1980 dissertation included an experimental field analysis of selective factors favoring social monogamy (the most frequent avian social system) of eastern bluebirds *Sialia sialis*, a species she and her students studied in the field from 1977 to 2007. She pioneered studies on extra-pair paternity in socially monogamous birds, the value of males for female reproductive success, ecological correlates of female-female aggression, and sex allocation in birds with helpers at the nest.

Her theoretical interests include the significance of variation among females in determining social organization; sex-neutral models of mating, and the effects of demographic stochasticity on fitness variances. Her collaborative studies from 1996 to 2007 on flies *Drosophila pseudoobscura*, mice *Mus musculus*, mallards *Anas platyrhynchos*, and fish demonstrated the generality that offspring viability is lower when individual females and males breed under experimentally enforced social constraints on their mate preferences than when they do not.

Her theory of reproductive compensation for offspring viability deficits predicts fitness outcomes, some of which are alternative to those of classic sexual selection, and as it applies to humans, it is among the very few theories of human fecundity that is predictive from first principals rather than correlational.

She is currently studying the benefits and costs of polyandry for females (and males) in 12 non-model *Drosophila* species, and considering polyandry from the perspective of stochastic life history and adaptation. She and her collaborators published a repetition of Bateman's (1948) classic study using the same *D. melanogaster* mutants Bateman used, and identified fatal flaws in the design of Bateman's original experiments.

She is interested in the logic and ethics of scientific discovery particularly how politics, world views, history, and local ecology inform, constrain, and distort the scientific process from hypothesis formation to design and interpretation of experiments and observations. She has edited two books, one on monogamy in birds, and one on evolutionary biology and feminism. She has published > 100 scientific articles in peer-reviewed journals and books, as well as many reviews and commentaries making a current publication list nearing 200.

She is an *Emerita* Fellow of the International Ornithologists' Union (2010); Fellow of: the Society of Biology (nominated and invited); the American Ornithologists' Union (1990), the Animal Behavior Society (1997) and the American Association for the Advancement of Science (2004).

She is a recipient of three prestigious NIH career awards (K-awards 1989-2001), the Quest Award for seminal contributions from the Animal Behavior Society (1997), and the Lamar Dodd Award for significant achievement in a body of research (1999), the highest research prize at UGA. NSF has continually funded her research since 1982, with current NSF funding through 2016. She was elected for life to the International Ornithological Committee in 1998.

She was President of the Animal Behavior Society (Presidential Series from 1998-2002, Presidential year 2000-2001) and Vice-President of the American Ornithologists' Union, and she has served or is serving as Associate Editor or on the Board of Editors for *American Naturalist*, *Animal Behaviour*, *Evolution*, *Behavioral Ecology and Sociobiology*, *Human Nature*, *EvoS*, *Proceedings of Life*, *Integrative Zoology*, *Ecology and Evolution (Wiley)*, and *PeerJ*.

She is a recipient of a UGA Excellence in Teaching Award (2003).

She is a Huffington Post blogger who concentrates on the evolutionary origins of sex differences. (<http://www.huffingtonpost.com/patricia-adair-gowaty/>).