



Joan Wood Lecture Series

Celebrating Women in Science. Showcasing Careers in Biology.

Wednesday, March 2, 2016 • 4:00 p.m. • Myers Hall 130

The company you keep matters: Exploring the evolutionary genetics of guppy cooperation at a teaching- intensive undergraduate institution



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Last year, Dr. Bleakley received a prestigious National Science Foundation CAREER Grant, given to young faculty who effectively integrate research and teaching. She has been recognized for her exemplary teaching and effective mentoring abilities at both Indiana University (where she received her Ph.D.) and Stonehill College.



Lecture abstract: Describing genetic influences on behavior is particularly challenging when genes carried by multiple social partners interact to generate behavior. The effects of a partner's genes on an individual's phenotype are termed indirect genetic effects (IGEs). Trinidadian guppies are an excellent model system to investigate IGEs on behavior because guppies perform a suite of cooperative antipredator behavior that is strongly influenced by social partners and varies greatly across populations. The Bleakley lab uses quantitative genetic breeding designs along with measures of gene expression, hormone excretion, and variation in the lateral line organ to dissect the genetic architecture of IGEs. Dr. Bleakley works exclusively with diverse, often at-risk, undergraduates who contribute to the lab research agenda and conduct independent research before going on to STEM and health careers.

The **Joan Wood Lecture Series** provides a forum for undergraduates to interact with women in science-related careers. Designed to encourage undergraduate women to pursue advanced degrees in science, the series showcases the many career opportunities available to science majors.

Joan Wood, Ph.D., M.D., a medical geneticist, was a strong advocate of women in the sciences. She remained active in educational programs in the IU Department of Biology, where she earned three degrees. Memorial contributions made in her honor helped establish the lecture series.



The Indiana University Department of Biology, a unit of the College of Arts and Sciences, administers the Joan Wood Lecture Series. Visit www.bio.indiana.edu/events/lectures/wood.shtml for more information on Dr. Wood and the lecture series or to support the lectures.