## Consequences of sexual selection: from gene expression to cognition

While sexual selection is well known to act on sexual ornaments, mate choice and traits involved in competition for mates, it can have much broader consequences. We have used experimental evolution in *Drosophila* to study the imprint of sexual selection on gene expression patterns, life history traits, pathogen resistance and the ability to learn. The results suggest that sexual selection constraints the evolution of optimal female phenotypes.