



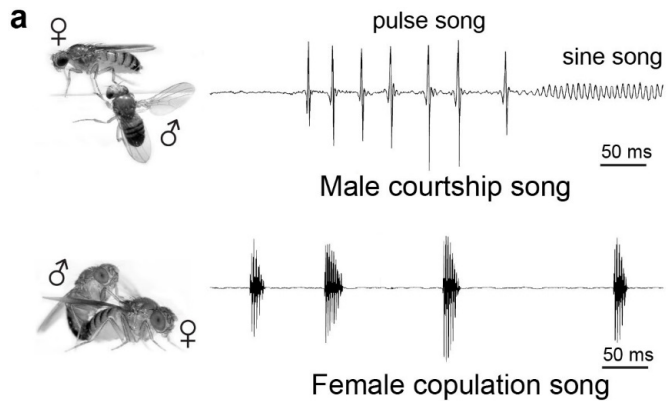
# Acoustic communication during *Drosophila* reproduction: genes, neurons, circuits, behavior

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*Drosophila* has a small nervous system, but displays complex behaviors. With a large genetic toolbox to probe and using the recent advances in connectomics, it is an outstanding model to study behavioural circuit neuroscience.

We study the neuronal control of *Drosophila* reproductive behaviour, with focus on acoustic communication during courtship and mating. Male courtship song, produced by wing vibration, is shaped by neuronal circuits which are in part also used for flight. Recently, we also found that female flies “sing” during copulation. Female copulation song depends on transfer of seminal fluid and female singing can influence male ejaculate allocation.

In summary, acoustic signalling of both sexes, arising from sexually dimorphic neuronal circuits and expression of master sex determination genes, critically contributes to mate choice and reproduction.



**Thursday December 5<sup>th</sup> at 14.15**  
**Seminar room at Zoophysiology (1131-127)**