

## Investigating the role of odorant binding proteins in the Drosophila post-mating response @NoraAndFauna

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Male KO of Obp56g, but not KD other Obps, affects female egg laying

Observed single pair matings between control or knockdown males and CS females. Removed male after mating (n > 25 for)each group)

Every 24 hours, vial and counted the number of eggs laid in previous vial









Obp56g expression in the male reproductive tract is restricted to the melanogaster and obscura group species

Obp56g

Expression of other Obp genes in the male RT is evolutionary labile

References: 1- Larter et al., 2016 eLife. 2- Findlay et al., 2008 PLOS Biol. 3- Billeter & Wolfner, 2018 J Chem Ecol. 4- Jeong et al., 2013 Neuron. 5- Avila et al., 2015 Genetics. 6- Lupold et al., 2013 PNAS. 7- Haerty et al., 2007 Genetics. 8- Sun et al., 2012 PLOS One. 9- Kelleher et al., 2009 Insect Biochem Mol Biol. 10- Sirot et al., 2008 Insect Biochem Mol Biol. 11-Baer et al., 2012 J Proteomics. 12- Xu et al., 2013 J Proteomics. 13- Yang et al., 2018 Life Sci Alliance. NIH R01-HD059060 to AGC and MFW.

evolving, and whether this is the case for the other seminal Obps with no detectable reproductive function.