



Master's Thesis Project available to decipher the neural circuitry regulating feeding in *Drosophila*

Overview of the working group

The nervous systems of animals control a wide range of essential behavioral and physiological processes including development, feeding, metabolism, stress, reproduction, aggression, sleep, and locomotion. Many of these processes are governed by neural circuits that are based on synaptic transmission. The complete neural circuitry (a brain connectome) of the vinegar fly *Drosophila melanogaster* is now available. Thus, we have a basic underlying framework that governs a wide array of complex behaviors in these animals. Our working group focuses on deciphering the neural circuitry regulating feeding and metabolism in *Drosophila*.

Project

The aim of this project is to gain insight into the neurons regulating feeding behavior using the *Drosophila* connectome. You will be responsible for using computational methods to 3D reconstruct neurons and analyzing connectivity between neurons of interest. Previous experience with Python or R would be preferred, but not necessary so long as there is to learn coding during the course of the project. Following successful training, you will have the option to work on this project remotely.

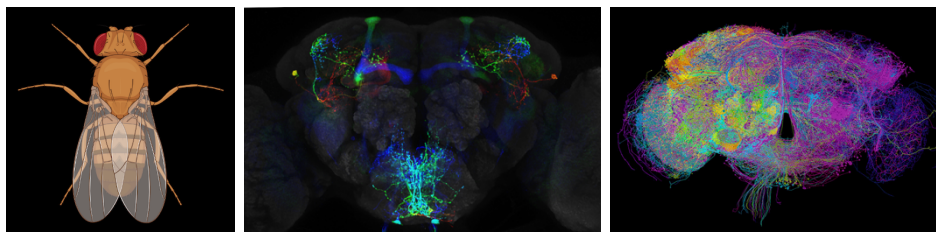
You will work in a highly motivated team working on various aspects of this project using diverse approaches including bioinformatics, anatomical mapping, genetics and behavior.

If you enjoy working with complex data and would like to work at the intersection of neuroscience, connectomics and genetics, please get in touch!

Recent publications:

<https://doi.org/10.1371/journal.pgen.1009425>

<https://doi.org/10.1371/journal.pgen.1007767>



Lab website: <https://lab.zandawala.com/>

Interested? Email meet.zandawala@uni-wuerzburg.de for more details!