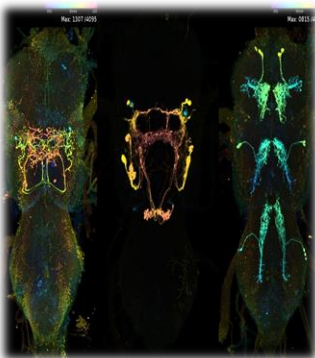


DANDRITE Topical Seminar

Wednesday 25 September 2018
10.00 – 11.00

Aarhus University, building 1171, room 440 (Library)
Ole Worms Allé, 8000 Aarhus C



Erica Ehrhardt, PhD

Janelia HHMI research Campus and
University Cologne, Germany

The VNC project: generating a cell-type specific driver line library targeting ventral nerve cord of *Drosophila melanogaster*

Flies perform precise and rapid behaviors using their wings, which are essential for their survival. Flapping flight is unstable and during flight, balance must be constantly maintained by using fast mechanosensory feedback from the wings and halteres to appropriately contract the approximately 20 steering muscles which control the wings. Likewise, male flies accurately produce a species-specific song using a different pattern of steering muscle activation or risk rejection. How are local circuits coordinating these two distinct patterns of steering muscle activity organized? How much overlap is there between circuit elements involved in the different behaviors? In order to investigate these questions, we used a split-GAL4 strategy to generate hundreds of cell-type specific driver lines targeting sensory, inter-, and motor neurons in the fly ventral nerve cord, with particular focus on the dorsal neuropils where the dendrites of the motor neurons for the neck, wing and haltere muscles are located.

Host: Associate Prof. and Group Leader Anne von Philipsborn, DANDRITE, Dept. of Molecular Biology and Genetics, Aarhus University.