

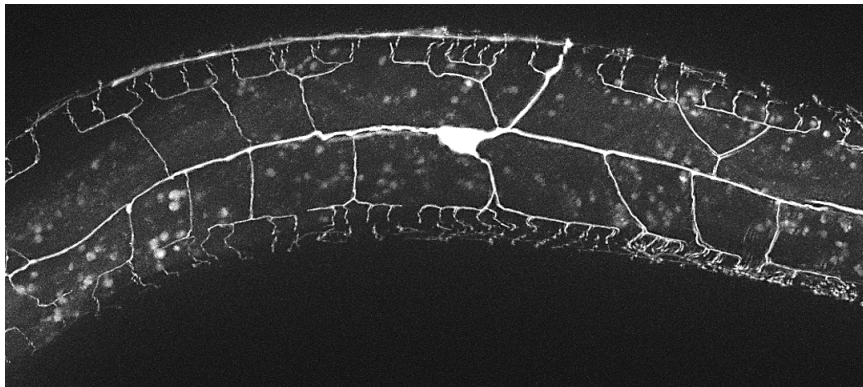
## Masterthesis – Developmental Neurobiology – Zanin lab

### Septin function in dendrite morphogenesis in *C. elegans*

How neurons acquire their complex morphology is an unsolved question in developmental biology. Changes in cellular shape are mediated by the cytoskeleton and we started to dissect septin function during dendrite morphogenesis in *C. elegans*. Septins are, besides actin, microtubules and intermediate filaments, an important and conserved class of filament forming cytoskeleton components. In humans, septin dysfunction is associated with autism and schizophrenia. We observed that septin mutants have defects in dendrite morphogenesis in *C. elegans*. The goal of the master thesis is to analyze at a molecular level how septins contribute to dendrite morphogenesis. Towards this goal a broad spectrum of molecular biology, genetics and microscopy-based methods will be applied.

Sent your questions or application (CV, transcript record and a short motivation letter) to Prof. Esther Zanin (esther.zanin@fau.de).

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*C. elegans* animal with a GFP-labelled neuron. The complex dendrite arbor spans across the entire animal and is involved in touch response.