

Einladung zum Vortrag  
im Rahmen des Kolloquiums Biologie und Umweltwissenschaften  
gemeinsam mit dem Department für Neurowissenschaften

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***“Investigation of the projections of GnRH neurons in the mouse brain by optical clearing methods”***

Examination of histological tissue has limitations in fluorescence dye microscopy. This is partly due to the nature and composition, as well as the resulting opacity of the respective tissue. In order to be able to cross these borders, various approaches to the manipulation of tissue have been used, which are already used in many working groups.

Using Clarity and 3Disco, we attempted to investigate if there are fiber connections from the hypothalamus to the hippocampus, starting from GnRH neurons. GnRH (Gonadotropin-releasing hormone) affects the pituitary gonadal axis and regulates sex hormones in the ovary and testis. Current work could further show that testosterone and estrogen can also be synthesized in mammalian hippocampal neurons. Our thesis is that GnRH influences the secretion of these steroids in the hippocampus, thereby affecting synaptogenesis. However, it is currently unclear how GnRH secreted by GnRH neurons reaches the hippocampus.

**14.11.2017, 17 Uhr s.t., W04 1-162**

Gäste aller Institute sind herzlich willkommen  
Gastgeber: Prof. Dr. Anja Bräuer