Neuronal circuits underlying goal-directed behavior

Lee Seung-Hee, Petersen Carl

**Cursus**
Neurosciences

**Sem.**

**Type**
Obl.

<table>
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<th>Language</th>
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**Frequency**
Only this year

**Remarque**
Next time: Spring 2018

**Summary**
The brain can be viewed as a network of neurons receiving sensory input and carrying out experience- and context-dependent computations through complex synaptic interactions to drive motor output, i.e. behavior. Here, we will study recent advances in knowledge of neural circuits in the mouse brain.

**Content**
Students will learn state-of-the-art analyses of neuronal circuit function contributing to simple learned goal-directed behaviors in mice. We will critically evaluate current understanding through in depth discussion of various topics, guided by selected papers (Thursdays 5 - 7 pm; 7 x 2 hours = 1 ECTS):

22nd March 2018

29th March 2018

12th April 2018

19th April 2018

26th April 2018

17th May 2018

28th June 2018

13th July 2018 (written report submission deadline)
For written evaluation, each student will critically discuss a neuronal circuit for a specific mouse behavior.

**Note**
Maximum number - 8 students

**Keywords**
Neuronal circuits
Mouse behavior

Learning Prerequisites

- Important concepts to start the course
- Strong interest in Neuronal Circuit function
- Learning outcome - to critically evaluate studies of neural circuits and behavior.

Assessment methods

13th July 2018 (written report submission deadline)
For written evaluation, each student will critically discuss a neuronal circuit for a specific mouse behavior.