## Module title
Neuromodulation and Neuronal Development

## Abbreviation
07-MS1NMND-152-m01

## Module coordinator
holder of the Chair of Neurobiology and Genetics

## Module offered by
Faculty of Biology

## ECTS
10

## Method of grading
numerical grade

## Only after succ. compl. of module(s)
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## Duration
1 semester

## Module level
graduate

## Other prerequisites
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## Contents
Neuromodulation: cellular and molecular biology of neuromodulators and their receptors, modulation of synaptic transmission and membrane potential, theoretical and functional aspects of neuromodulation, model systems used to study modulation of neuronal circuits. Fundamental principles of molecular developmental neurobiology. Focus is on the establishment of the neuroectoderm, pattern generation and regional specification, neuronal precursors, neuronal growth, differentiation of neurons, axonal pathfinding, neuronal connectivity.

## Intended learning outcomes
The students learn fundamental principles underlying neuromodulation and neuronal development and obtain an insight into current research in the field. In the seminar, students practise presenting and discussing research findings in English.

## Courses
(type, number of weekly contact hours, language — if other than German)
V (2) + S (1)

Module taught in: English

## Method of assessment
(type, scope, language — if other than German, examination offered — if not every semester, information on whether module is creditable for bonus)
Students will be informed about the method, length and scope of the assessment prior to the course. Usually, one of the following options will be chosen: a) written examination (30 to 60 minutes, including multiple choice questions) or b) oral examination of one candidate each (30 to 60 minutes) or c) oral examination in groups of up to 3 candidates (30 to 60 minutes)

Language of assessment: German and/or English

## Allocation of places
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## Additional information
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## Referred to in LPO I (examination regulations for teaching-degree programmes)
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## Module appears in
Master's degree (1 major) Biology (2015)
Master's degree (1 major) FOKUS Life Science (2015)
Master's degree (1 major) Biosciences (2016)
Master's teaching degree Gymnasium MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Supplementary course MINT Teacher Education PLUS, Elite Network Bavaria (ENB) (2016)
Master's degree (1 major) Biosciences (2017)
Master's degree (1 major) Biosciences (2018)