Level: PhD

**Course title:** Metabolism and biological significance of arachidonic acid (DSB611) **Status**: elective

**ECTS**: 15

Requirements: none

## Learning objectives

The goal of the course is to provide students with detailed theoretical knowledge of the metabolism and biological significance of arachidonic acid.

## Learning outcomes

Students should know pathways and properties of enzymes involved in arachidonic acid metabolism, mechanisms of product synthesis and their biological activity.

## Syllabus

Theoretical instruction:

The structure and origin of arachidonic acid. The release of arachidonic acid from the cell membrane. Review of the metabolism of arachidonic acid. Types, structure and mechanisms of action of enzymes involved in cyclooxygenase, lipooxygenase and epoxygenase pathways. Biological activity of eicosanoids. Role of eicosanoids in pathological processes. Inhibitors of eicosanoid synthesis. Experimental methods in eicosanoid research.

Weekly teaching load				Other:
Lectures: 5	Exercises:	Other forms of	Student research: 5	
		teaching:		