

## COURSE DETAIL

### CELLULAR AND MOLECULAR NEUROBIOLOGY

**Country**

Sweden

**Host Institution**

Lund University

**Program(s)**

Lund University

**UCEAP Course Level**

Upper Division

**UCEAP Subject Area(s)**

Biological Sciences

**UCEAP Course Number**

165

**UCEAP Course Suffix****UCEAP Official Title**

CELLULAR AND MOLECULAR NEUROBIOLOGY

**UCEAP Transcript Title**

CELL & MOL NEUROBIO

**UCEAP Quarter Units**

12.00

**UCEAP Semester Units**

8.00

## Course Description

The course reviews the most important principles and technologies in cellular and molecular neurobiology with a focus on understanding the methods used to increase our knowledge and be able to relate this to current research in the subject area. The course starts with an introduction to important methods for studies on molecular and cellular neurobiology, as well as basic practical exercises. The course also includes detailed studies of the mechanisms that underlie neuronal signaling and cell function, and how these are activated during development and neuronal plasticity. A central part of the course is the application of technologies that push the research forward, including optogenetic manipulation and gene editing to manipulate neural circuits and identify neural functions.

## Language(s) of Instruction

English

## Host Institution Course Number

BIOR84

## Host Institution Course Title

CELLULAR AND MOLECULAR NEUROBIOLOGY

## Host Institution Course Details

<https://www.lunduniversity.lu.se/lubas/i-uoh-lu-BIOR84>

## Host Institution Campus

Lund

## Host Institution Faculty

Science

## Host Institution Degree

## Host Institution Department

## Course Last Reviewed

2023-2024

[Print](#)