COURSE DETAIL

MOLECULAR BIOTECHNOLOGY
Country Sweden
Host Institution Lund University
Program(s) Lund University
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Biological Sciences Bioengineering
UCEAP Course Number 156
UCEAP Course Suffix
UCEAP Official Title MOLECULAR BIOTECHNOLOGY
UCEAP Transcript Title MOLECULAR BIOTECH
UCEAP Quarter Units 12.00
UCEAP Semester Units 8.00

Course Description
This course reviews some of the most exciting topics within yeast and mammalian genetics, cell biology, and molecular biology, and looks for possible applications of these topics in biotechnology, medicine, drug development, food technology, etc. This course also provides a view on innovations, patents, start-up companies, and is therefore a good preparation for work in biotech and biomedical industry. The course includes an experimental part on either genetics, cell biology, molecular biology, or bioinformatics of bacterial, yeast or mammalian cells, trying to solve applied problems in the lab. For example, you can do a screening for mutants of suicide genes useful for anti-cancer gene therapy, or analyze the genome of a yeast important in wine industry, etc. This course also contains a large literature project on molecular and cell biology or genetics topics, which also have an applied aspect. For example, you can write a project on: molecular targets for novel antibiotica against multi-resistant microbes, GMO yeast strains in future food products, efficient and selective delivery systems in gene therapy, etc. The "classical" exam is replaced by written project reports and their oral presentations. The course concludes with two comprehensive written projects and two oral presentations of the selected theoretical and lab projects.

Language(s) of Instruction
English

Host Institution Course Number
BIOR31

Host Institution Course Title
MOLECULAR BIOTECHNOLOGY

Host Institution Course Details

Host Institution Campus
Science

Host Institution Faculty

Host Institution Degree

Host Institution Department
Biology

Course Last Reviewed

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