

COURSE DETAIL

MAMMALIAN GENOMICS

Country

Denmark

Host Institution

University of Copenhagen

Program(s)

University of Copenhagen

UCEAP Course Level

Upper Division

UCEAP Subject Area(s)

Biological Sciences

UCEAP Course Number

117

UCEAP Course Suffix**UCEAP Official Title**

MAMMALIAN GENOMICS

UCEAP Transcript Title

MAMMALIAN GENOMICS

UCEAP Quarter Units

6.00

UCEAP Semester Units

4.00

Course Description

This course provides an advanced approach to theoretical and practical genomics with a focus on mammals. The course introduces methods and technologies currently used to dissect, describe, and characterize complex genomes. Aspects of both research and application within the field of genomics is addressed. Topics include animal models and comparative genomics; organization and content of the mammalian genome; human genetic variation; genetic mapping of mendelian characters; mapping genes conferring susceptibility to complex diseases; gene expression and epigenetics; sequencing genomes: techniques, challenges, and bioinformatic analysis; molecular pathology, cancer, and pharmacogenetics; genetic testing of individuals; genetic manipulation of cells and animals, gene therapy, and stem cells; and biomarkers.

Language(s) of Instruction

English

Host Institution Course Number

SBIB10170U

Host Institution Course Title

MAMMALIAN GENOMICS

Host Institution Campus

Host Institution Faculty

Faculty of Health and Medical Sciences

Host Institution Degree

Bachelor

Host Institution Department

Department of Veterinary and Animal Sciences

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