COURSE DETAIL

CELL BIOLOGY OF DISEASE
Country Ireland
Host Institution University College Dublin
Program(s) University College Dublin
UCEAP Course Level Upper Division
UCEAP Subject Area(s) Biological Sciences
UCEAP Course Number 149
UCEAP Course Suffix
UCEAP Official Title CELL BIOLOGY OF DISEASE
UCEAP Transcript Title CELL BIO OF DISEASE
UCEAP Quarter Units 5.00
UCEAP Semester Units 3.30

Course Description

This course provides perspective about how a number of both common and rare diseases arise, and explores the associated changes that are seen at the cellular and tissue level. The course uses a number of specific examples of diseases that arise from single point mutations (for example skeletal deformities such as Smith-McCort dysplasia), as well as complex disease that arise from wider sets of gene alterations (for example various cancer types). Lectures are complemented by a series of laboratory classes that expose students to key aspects of how molecular cell biology approaches are used to understand and combat various diseases. Students gain experience with advanced disease models, three-dimensional spheroids, and their characterization by microscopy, as well as how they can be used to assess the efficacy of bioactive compounds. In addition, the laboratory classes teach students how molecular biology methods can be used to diagnose a disease and guide treatment.

Language(s) of Instruction
English

Host Institution Course Number
CELB30130

Host Institution Course Title
CELL BIOLOGY OF DISEASE

Host Institution Course Details
https://hub.ucd.ie/usis/!W_HU_MENU.P_PUBLISH?p_tag=MODULE&MODULE=CELB30130&ARCH...

Host Institution Campus
University College Dublin

Host Institution Faculty
Biology & Environment Science

Host Institution Degree

Host Institution Department

Course Last Reviewed
2024-2025

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