

BIO-603(DP)

Practical - Dyson Lab

Dyson Paul Joseph

Cursus	Sem.	Type
Molecular Life Sciences		Obl.

Language of teaching	English
Credits	1
Session	
Exam	Oral presentation
Workload	30h
Hours	24
Lecture	6
Practical work	18
Number of positions	4

Frequency

Every year

Remark

3-day Block course, every year in January. To register, contact EDMS Administration

Summary

In vitro cytotoxicity testing is often the first step to establish the utility of a compound as a potential drug. The course will teach students how to evaluate the cytotoxicity of compounds on cancer cells of human-origin and appropriate non-tumorigenic cell lines.

Content

In the course, the MTT cell viability assay will be used to determine compound sensitivity profiles and to estimate the efficacy of potential chemotherapeutic compounds as drugs.

Preparation, treatment and analysis:

- Plating cancer and non-tumorigenic cells
- Preparation of compound dilutions
- Cell treatment protocols
- Determination of the cell viability
- Spectrophotometric analysis
- Preparing compound sensitivity profiles
- Estimation of errors and statistical analysis

Note

The course won't take place in January 2024. Back in 2025!

Please note that you are not allowed to inscribe in your own group!

Note that 3 practical courses are mandatory for all EDMS students and that they have the priority; each course has between 2 to 4 possible slots.

Therefore, please do not register by yourself to this course, this will be done by the EDMS program administrator!

Keywords

Cancer; chemotherapy; drug screening

Learning Outcomes

By the end of the course, the student must be able to:

- Assess / Evaluate the cytotoxicity of a compound

Assessment methods

Oral presentation

Resources

Websites

- <https://www.epfl.ch/labs/lcom/>