

SBIM9213 Training course in cell biology

[30h] 3 credits

Teacher(s): Language: Level: Pascal Kienlen-Campard French

Aims

The aim is to learn the basic techniques of cell biology: -cell culture and propagation ; -morphological and microscopic examination of the cells ; -analysis of cell proliferation and cell survival, -introduction to the analysis of cell populations by FACS (Fuorescence-Associated Cell Sorter). Our aim is also to train students to write a laboratory notebook and a training course report.

Main themes

-culture of cell lines in sterile conditions ;

-cell analysis by fluorescent microscopy;

-biochemical assays (proteins, cell proliferation and cell survival assays);

-introduction to FACS analysis and study of the characteristic profile of selected cell populations.

Content and teaching methods

This training course takes place during 5 consecutive afternoons in two research laboratories of the Faculty. Students will work in small groups (usually 2 students) under the supervision of a research scientist.

Other information (prerequisite, evaluation (assessment methods), course materials recommended readings,

...)

Prérequisites : those of Bac2.

Links : This training course requires knowledges from the practical courses of biology (Bac1, MD1107, General Biology) and prepares to the further laboratory training courses (SBIM9212, Stage de laboratoire)

Assessment : continuous and on the basis of the training course report.

Supervision : an assistant (with the help of other members of the research group).