Scientific project design in regenerative medicine and diagnostics

BIO-469 – 12 ET

Teachers:
Prof. Matthias Lütolf
Prof. Sebastian Maerkl

Location: BC 02

Lecture	Date	Description
1 - Maerkl	26.09	Intro to Molecular Diagnostics
2 - Maerkl	03.10	Rudolf Griss (Lucentix)
3 -	10.10	(no class)
4 - Lutolf	17.10	Intro to Regenerative Medicine **Groups must have been formed**
5 -	24.10	(no class)
6 - Maerkl	31.10	Ata Tuna (Lunaphore) **Feedback on potential projects**
7 - Maerkl/Lutolf	07.11	**Project Presentations**
8 -	14.11	(no class)
9 - Lutolf	21.11	Rajwinder Lehal (http://www.cellestiabiotech.com/) Natalia Giovannini (EPFL Tech Transfer)
10 - Lutolf	28.11	Sylke Hoehnel (www.sunbioscience.ch/)
11 -	05.12	(no class)
12 - Maerkl/Lutolf	12.12	Meeting
13 - Lutolf	19.12	**Final Presentations + 1 hour**

Summary:
In this course students will be exposed to the fields of regenerative medicine and molecular diagnostics with a specific focus on how scientific developments in these fields are translated to the market through the formation of start-up companies.

Teaching Methods:
The course will consist of one introductory lecture to the fields of regenerative medicine and diagnostics, followed by several presentations by representatives from early-, mid-, and late-stage startup companies.

During the first half of the semester students will form teams and develop project ideas for a potential start-up company. During the second half of the semester each team is expected to prepare a scientific project description, a business plan, and a patent disclosure. At the end of the course, each team will "pitch" their start-up company in an oral presentation given to the rest of the class.

Assessment Methods:
Grades will be based on the quality of the written report and the oral presentation.

Course Deliverables:

1. Project **presentation** (15 minute oral presentation + 5 minute questions)
2. Written **report** of max. 15 pages (excluding references) with the following structure:
    a. Executive Summary (max. 1 page)
    b. Introduction and Objectives (max. 2 pages)
    c. Market Analysis (max. 2 pages)
    d. Stakeholders (max. 1 pages)
    e. Background (max. 3 pages)
    f. Product Development Plan (max. 5 pages)
    g. Costs (max. 1 page)
    h. Bibliography