**MBB 400/700 – Special Topics in Biotechnology and Business.**

**Course Description:** This course is an introduction to the biotechnology landscape from an original scientific discovery/idea to the technology transfer phase and finally to launch phase into the market. There will be discussions on commercialization, patents, clinical trials, business plans, start-ups, VC, ethics, including the many challenges and hurdles faced by biotechnology companies during the development to market phases. A discussion of different career opportunities in the biotechnology sector is also explored.

The course format will include formal lectures (delivered by the instructor and/or an invited speaker), group discussion, some readings, one-page report and presentations.

**Weekly Topics:**

1. Instructor: Introduction to the biotechnology and pharmaceutical industry and academic research field.
2. Instructor: Introduction to the biotechnology development phases: challenges and hurdles
3. (Guest Speaker): Research and development phase in the company: QC and QA
4. (Guest Speaker): Patents, licensing and IPs: Perspectives from academia and industry
5. (Guest Speaker) Different phases of clinical trials
6. (Guest Speaker) Commercialization centers and their role in the biotech phases
7. Instructor: Marketing, market research and analysis and pricing policy
8. Instructor and Guest Speaker: Entrepreneurship and biotech start-ups: From the ground up to acquisitions and mergers.
9. (Guest Speaker): Ethics and Biotechnology
10. (Guest Speaker): Fundraising and Venture Capital
11. (Guest Speaker): The role of the CEO in a biotechnology company
12. Instructor and Panelist: Career opportunities beyond the lab
13. Business pitch

**Grading:**

- One Case Study (Individual assignment – 1 page summary) 10%
- Industry Analysis (Presentation and 1 page executive summary - Group assignment) 15%
- “Dragon’s Den-style” pitch/presentation (Group assignment) 75%

(Pitches will be made to a selected panel of entrepreneurs, scientists and business representatives from the biotech industry). Students will be graded based on the quality of their research into their business of choice, the quality of their pitch and the likelihood of their pitch getting funding.