TECH 491: Market Assessment for Innovative Technologies in Biomedical Sciences

The course provides an introduction to the financial and business aspects of valuation in biomedical sciences. We use practical presentations and case study methods to give students hands-on valuation experience. Assigning a value to an innovative technology or a valuation to a technology company in biomedical sciences can be seen as challenging, given their novelty. This course helps students identify the assumptions and factors required to establish value. We then develop a framework to help prioritize which factors affect that value the most. Students will learn how to assign current and future worth to a technology, a product, or a company, based on the market potential, market need, and competition. Students will work on projects involving evaluation of a therapeutic, a diagnostic, and/or a life sciences tool/instrument. This course provides the framework for making judgments and valuations, including: Market analysis and market research processes to form assumptions and define elements that contribute to a technology's or a company's value; Market sizing techniques; How to assess a biotech company for financing rounds and M&A; How to consider future value of a product when assessing the value of the intellectual property today; Net present value models in Excel; Assigning value to a management team's expertise and track record; Types of risks (discounting); Excel models for defining market sizes and valuation (NPV). This class is interactive, and students work in groups to allow interactive learning.

Learning Objectives

Students will learn:

• The basic factors involved in assessing a technology, market or company
• Which concepts, tools and techniques are useful for assessing a market and valuation
• How to assess a company prior to the valuation
• How to value an idea, platform, technology, or company
• How to calculate value of a technology students may currently be working on
• Understanding the key components of a therapeutic product valuation, and which are the key value drivers
• Understanding investors' objectives in considering a biomedical company/product

Sample syllabus is subject to change.

Credits: 2
Class Type: Graduate Course
Program: Technology Transfer, Business, and Industry
Availability: Fall 2021
Session: Session A