



UNIVERSITÀ  
DEGLI STUDI  
DI PADOVA

DIPARTIMENTO  
DI INGEGNERIA  
DELL'INFORMAZIONE

LECTURE TITLE

## DE-RISKING INVESTMENTS IN MEDICAL INNOVATION

Dates:

September 29<sup>th</sup> & 30<sup>th</sup>

Venue:

Dipartimento di Ingegneria dell'Informazione UniPD



### Visiting Lecturer

Luigi Negri

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Office Hours, by appointment through: <http://luigi.uiowa.pro>



## LECTURE'S OBJECTIVE

This lecture aims to give attendees **an overview** of the content of an actual, much larger course ("De-risking Investments in Medical Innovation") that focuses on the critical challenges faced by entrepreneurs investing in medical technology innovation.

The course proposes a decision-making methodology designed to minimize the common decision-making pitfalls that currently cause the failure of more than 75% of medical startup initiatives.

While both this "demo lecture" and the actual course explicitly focus on medical innovation (MedTech, HealthTech, and BioPharma), the highlighted causes of startup failures and **the underlying concepts behind the proposed methodology apply to all technology fields.**

Attendees will thus be confronted with the entrepreneurial challenge of reducing the very high risk of failure in medical innovation. Still, they can quickly extend and bring the fundamental concepts to their respective technology fields.

In the context of medical innovation, this lecture aims to provide a very brief, practical understanding of the managerial issues underlying the high startup failure rates and the tools necessary to maximize the likelihood of success.

The underlying philosophy consists of the systematic employment of fact-based, rational decision-making approaches achieved by extending the use of the scientific decision-making method (typically restricted to clinical trials) to all the startup founder's key managerial and business decisions.

## LECTURER'S PROFILE

Luigi is Managing Partner at Thinken® Global Consulting, specializing in global business strategy for the Life Science industry, which he founded in early 2013. Through its international partners and offices, the firm focuses on global market access for the life science industry and on the financial valuation of innovative medical start-ups. In the previous twenty-five years, Luigi has succeeded in several international corporate assignments with both commercial and general management responsibilities in the biotechnology and medical devices industry across multiple global corporations. These included VP Northern & Central Europe for CR Bard (Becton Dickinson), VP-GM Emerging Markets of Latin America at Baxter Health Care, and Area GM for Poland & Russian Federation at Baxter Health Care. Luigi lives in Miami (FL), holds an MS in Electronic Engineering from the University of Bologna, an MBA from the University of Kansas, and is a November 2022 doctoral candidate in Managerial Economics at Bocconi University. Luigi is an Adjunct Entrepreneurship and Global Marketing professor at the University of Iowa's Tippie College of Business.

## COURSE CONTENTS & AGENDA

September 29th 2022				
Start	End	Duration	Topic	
9:00	9:25	0:25	<b>Welcome, Agenda &amp; basic information about Medical Innovation</b>	
9:00	9:05		0:05	Introduction to Lecture Goals & Agenda
9:05	9:15		0:10	Global Innovation Trends in Life Sciences
9:15	9:25		0:10	Life Sciences vs. Health Care - HealthTech vs. MedTech vs. BioPharma
9:25	10:15	0:50	<b>Why medical innovation is challenging - Why Medical Startups Fail</b>	
9:25	9:30		0:05	The Case of Theranos (one of the most famous startup failures)
9:30	9:40		0:10	The Case of 'Frequent Medical' (Improving Epidural Safety)
9:40	9:50		0:10	Why Medical Innovation Startups Fail: an overview.
9:50	10:05		0:15	One of the sources of complexity: HealthCare Stakeholders & Reimbursement
10:05	10:15		0:10	<b>Break</b>
10:15	11:00	0:45	<b>Medical Innovation: a smarter decision-making approach</b>	
10:15	10:25		0:10	Smarter Decision Making Process: Prioritized Scientific Decision Making
10:25	10:40		0:15	The fundamental questions of all Medical Innovators
10:40	10:50		0:10	The centrality of Venture Valuation
10:50	11:00		0:10	<b>Q&amp;A</b>
September 30th 2022				
Start	End	Duration	Topic	
9:00	9:30	0:30	<b>From Valuating Innovations to Attracting Investors</b>	
9:00	9:10		0:10	Financing Innovation: Funding Stages
9:10	9:20		0:10	Financing Innovation: Investor Types
9:20	9:30		0:10	Financing Innovation: Venture Capitals and what they look for
9:30	10:10	0:40	<b>The Prioritized Scientific Method Approach</b>	
9:30	9:35		0:05	From Venture Value to Problem Mapping
9:35	9:50		0:15	Mapping Decision Problems
9:50	9:55		0:05	The Complete Medical Innovation Map
9:55	10:00		0:05	Startup resource scarcity and the need for Problem Prioritization
10:00	10:10		0:10	<b>Break</b>
10:10	11:00	0:50	<b>More about the application of the scientific method to business decisions</b>	
10:10	10:25		0:15	Using the Scientific Method in Business Decisions
10:25	10:30		0:05	More Complex Decision trees & Pivoting Options
10:30	10:35		0:05	Distinguishing Investment Decisions from Investigations and Assumptions
10:35	10:50		0:15	Case: Applying the methodology to a real Medical Innovation Problem
10:50	11:00		0:10	<b>Q&amp;A</b>

