

COURSE SYLLABUS

Course Objective:

To provide future scientific and business leaders a primer in entrepreneurship and innovation in the field of cancer.

Course Schedule

Class Day	Topic	Professors	Topics
Monday, Dec 8	Context Setting	<ul style="list-style-type: none"> • Imke Ehlers-Surur, PhD – Director, Business Development & Licensing • Anu Mohan, MS – Senior Strategic Initiatives Manager 	Syllabus review
	Diagnostics, Digital, Devices, Delivery, and Data	<ul style="list-style-type: none"> • Ben Mumford, MS – Senior Licensing Manager (MSK) • Stephen Solomon, MD – Chief of Interventional Radiology • Michael Frank, MBA – Director, Digital Health BD & Licensing • Jake Cohen, MS – Program Manager, AiTDIF 	The 5Ds: There are more than just drugs in healthcare, what are they and how do they work?
	Intro to Tech Transfer at MSK	<ul style="list-style-type: none"> • Yashodhara Dash, MBBS, PhD, MBA – Vice President, Entrepreneurship & Commercialization 	Learn what tech transfer entails. Learn about the Office of Entrepreneurship & Commercialization
Tuesday, Dec 9 (Morning)	Intellectual Property & Patents	<ul style="list-style-type: none"> • Hilary Libka, JD – Vice President, Associate General Counsel; Chief IP Counsel • Karlo Perica, MD, PhD – Lab Head, Perica Lab 	How to protect your inventions and prepare them for commercialization.
Tuesday, Dec 9 (Afternoon)	Startup Formation & Venture Capital	<ul style="list-style-type: none"> • Glennis Mehra, PhD – Director, Entrepreneurship Initiative 	Figure out how to build an idea into a full-fledged company ready to seek funding.
Wednesday, Dec 10	Market Forecasting & Valuation	<ul style="list-style-type: none"> • James Delorme, PhD – Senior Licensing Manager • Jim Reddoch, PhD – EVP, Royalty Pharma 	Understand what market factors impact the commercial outlook for a company or product.
Thursday, Dec 11	Business Plan & Pitch Decks	<ul style="list-style-type: none"> • Zariel Johnson, PhD – Senior Licensing Manager 	Organize and execute on a plan for advancing and

		<ul style="list-style-type: none"> • Carlo Yuvienco, PhD – Incubator Director, Ford Center for Life Science Innovation 	expanding your company or technology. (Jury: Glennis, Carlo, Imke)
Friday, Dec 12	Drug Development Process	<ul style="list-style-type: none"> • Lisa Kennedy, PhD – Director, Business Development & Licensing • Peter Meinke, PhD – Director, Therapeutics Bridge Labs • William Pao, MD, PhD – EVP and Chief Development Officer, Pfizer 	See how a drug goes from being an idea to being administered to a patient.

Course Pre-Reads

Please read through the relevant document, article, or pages prior to the respective course date as these materials will be referenced throughout the course.

All documents have been shared with you via email or are linked in the below table.

Course	Pre-read	Notes
Introduction to Tech Transfer, Intellectual Property and Patents	MSK's Policy on Intellectual Property	On MSK website.
Diagnostics, Digital, Devices, Delivery and Data	The Innovation and Evolution of Medical Devices by S. Abbas Shobeiri	Read Chapter 2: The Innovation of Medical Devices (accessible via the MSK Library)
Startup Formation and Venture Capital	The Entrepreneur's Guide to a Biotech Startup, 4th Edition by Peter Kolchinsky (Link)	Read pages 1-21; 76-88 (Equity and Raising Money), 93-94 (IPO: Going Public)
Market Forecasting and Valuation	Gilead Sciences: Developing a Biopharmaceutical Pipeline Through M&A (Link)	Use the linked webpage to download a copy of the HBR case study. Please do not share the link with any others. There are limited copies exclusive to the students in this class. Pay attention to what factors Gilead considered when it bought smaller biotechs or in-licensed assets. Please also think about how Gilead arrived at its purchase price.
Business Plan and Pitch Decks	Company executive summaries (on Moodle).	Familiarize yourselves with the content of the 4 documents and think about how you would generate interest in the company if you were the founder. Class

		will be split into teams and each team will select one of the included companies to pitch.
Drug Development Process	BREAKTHROUGH The Quest for Life-Changing Medicines by William Pao (on Moodle)	<i>Password: drugdiscovery123</i> No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher, except in the case of brief quotations embodied in critical reviews and certain other noncommercial uses permitted by copyright law. For permission requests, contact the author.

Grading Rubric

Content	Grade Proportion
Participation	50%
Class Assignments (Pre-reads, in-class projects, collaboration, etc.)	20%
Final Project	30%

Expectations

- Participate in class – your grade is largely determined by your participation
- Refrain from using your phones or laptops during class time unless required for in-class assignments and projects
- Refrain from side conversations during class time – for urgent needs please take calls, conversations, etc outside of the classroom
- Treat each other with respect – we are all learning and have different levels of experience and knowledge in given topics