## Health Care Technological Innovation From Idea to Commercialization











## "Health Care Technological Innovation - From Idea to Commercialization" The Fifth Course

An Executive Program for Biotechnology and Medical Device Entrepreneurs and Managers Offered by:

The Leon Recanati Graduate School of Business Administration, Tel Aviv University

In collaboration with

The Israel Life Science Industry Organization
The International Institute for Biotechnology Entrepreneurship
The Center for Medicine in the Public Interest

Monday, December 12 through Wednesday, December 14, 2011, Tel Aviv, Israel

## **Program Directors:**

Program Founder	For the Recanati Business School	For International Institute for Biotechnology Entrepreneurship	For The Center for Medicine in the Public Interest	For Canaan Partners
		Stephen M. Sammut		
		Senior Fellow, Health Care		
Dr. Benny Zeevi	Prof. Simon	Systems and Entrepreneurial	Robert Goldberg,	<b>Brent Ahrens</b>
Managing General	Benninga	Programs,	Ph.D.	General Partner
Partner	Faculty of Management	Wharton School, University of	Vice President	
DFJ Tel Aviv Venture	Tel-Aviv University,	Pennsylvania	CMPI	
Partners	Israel	Venture Partner, Burrill & Company		

## **Course Syllabus**

Day One: Monday December 12, 2011	
	Day's Theme: The Creative Process and building value??
8:30 AM	Registration/Administrative Continental Breakfast
9:00 AM	Session 1: Welcome and Opening Remarks:
	Prof. Asher Tishler, Dean Faculty of Management, Tel Aviv University Course Directors
	Acknowledgement of Sponsors
	Course Infrastructure:
	Introduction to Program Structure Review of required assignments Formation of study teams
9:30 AM	Session 2: Lecture Benny Zeevi, M.D. Managing General Partner, DFJ Tel Aviv Venture Partners "Innovations in Life Sciences, and Israel Life Science Industry"

10.15AM	Session 3: The Persuasive Pitch, Part 1: Introduction of course participants
	Moderators: Stephen M. Sammut, Senior Fellow, Health Care Systems and Entrepreneurial Programs, Wharton School, University of Pennsylvania
	Benny Zeevi, M.D. Managing General Partner, DFJ Tel Aviv Venture Partners
	David Frank, Managing Director MEDX Associates LLC – "Making YOUR Pitch Persuasive"
	In order to give participants a chance to learn more about their colleagues in the course, and as the first part of our special focus on presentations, we are asking each participant to prepare to deliver a 3-5 minute presentation, using 2-4 power point slides, to introduce yourself and your company to the group
12:20 PM	Networking Luncheon
1:15 PM	Session 4: Lessons learned from our experience: A panel of life science CEOs In this session we will have several US and Israeli CEOs in life sciences sharing their experience. Specifically addressing issues: Building a management team, financing, collaborations, dealing with the board and more Moderators: David Cassak, VP/Content, Elsevier Business Intelligence
	Andy Weiss, President & CEO, CoAxia, former Vice President & General Manager of Medtronic Neurological.
	Dr. Udi Cohen, CEO, BioControl Medical
	Hezi Himelfarb, CEO, IceCure Medical

	Sonny Vu, Founder of AgaMatrix
	Ascher Shmulewitz, M.D., President Medegenesis
3: 00 PM	Bio Break
3:30 PM	Session 5: Market Analysis and Competitive Analysis - Essentials of Marketing in Biotechnology and Medical Devices This session will focus on Market analysis, Clinical state of the art and product positioning: assessment of different applications for the same product (choosing the right application from commercial point of view), Determination of subgroup of patients most appropriate for the product, Competitive analysis, Pricing and reimbursement strategy, Importance of opinion leaders, patients groups, patients organization and Selling strategy.  Moderator: Stephen M. Sammut, Senior Fellow, Health Care Systems and Entrepreneurial Programs, Wharton School, University of Pennsylvania  David Frank, Managing Director MEDX Associates LLC  Andy Weiss, President & CEO, CoAxia, former Vice President & General Manager of Medtronic Neurological

5:00 PM	Session 6 :Case Study "Deep Breeze Brings an Innovative Case to Market"
	Faculty led discussion of a case prepared by the INSEAD Israel Research Centre: Stephen M. Sammut, Senior Fellow, Health Care Systems and Entrepreneurial Programs, Wharton School, University of Pennsylvania
	With participation of: Doron Nahmias, Managing Director INSEAD Israel , Dr. Paivi Jokola Researcher INSEAD Israel, Yoav Cheluoche, Managing Partner, Aviv ventures
6.00PM	<b>Keynote Address</b> Introduction: Robert Goldberg, PhD, Vice President, Center for Medicine in the Public Interest
	Frank L. Douglas, Ph.D., M.D. President & CEO, Austen BioInnovation Institute in Akron
	"Value Driven Engineering: A New Approach for Promoting Innovation"
6:45 PM	Session 7: Keynote lecture:
	Dafna Sheinwald, IBM Haifa Research Lab
	IBM Watson – A System Designed for Answers and its roll in healthcare.
7:45 PM	Dinner for Faculty and Participants At the Green Vila, Tel Aviv University
	Courtesy of Mintz Levin

	Day 2: Tuesday December 13, 2011
	Day's Theme: Strategy and Execution
8:30 AM	Continental Breakfast
9:00 AM	Session 8: Biotechnology and Medical device Regulatory Planning, Clinical Development and the Implications for Strategy and Financing: From Proof of Concept to Marketing Success  This session provides an abbreviated view of the overall process and specific insight into planning for FDA regulations in light of strategy, financial needs, and the concerns of prospective partners and investors. Entrepreneurs need to understand that there is an increasing need to perform clinical studies to support medical device safety and performance claims. They also need to have a basic understanding of the activities, resources and costs associated with the design and conduct of clinical studies. The failure to incorporate an effective clinical strategy into new project planning can lead to significant project and funding delays or, worse, the failure of the project. This session will provide an overview of the increasing need for device clinical study data; key activities, resource needs and costs; and planning for the successful design and conduct of medical device clinical studies for acceptance in the United States and Europe, even when these studies are conducted outside of these regulatory jurisdictions.  Moderator: Robert Goldberg, PhD, Vice President, Center for Medicine in the Public Interest
	Benny Zeevi, M.D. Managing General Partner, DFJ Tel Aviv Venture Partners  Heather Rosecrans, Former FDA 510(k) Director, Senior Advisor, Regulatory Affairs  Greenleaf Health LLC

	Estelle Geffard-Duchamp, Associate Director of Regulatory Affairs, MedPass International Andy Weiss, President & CEO, CoAxia, former Vice President & General Manager of Medtronic Neurological.
10:30AM	Session 9: Lecture
	Developing consumer healthcare products: Proctor & Gamble, Develop and Connect Program
	Lital Asher, Israel Innovation Leader & External Relations Manager
11:00	Bio Break
11:30	Session 10: Emerging Markets – Opportunities for Life Science companies
	The growth of biotechnology and other health related industries in Brazil, China and India is taking place at a stunning pace. While this fact might appear to be a competitive threat to Israeli entrepreneurs, it is in fact an opportunity. Companies in these countries are eager to collaborate with Israeli companies. This session will describe the status of activity in the three most rapidly advancing countries and will also describe how Israeli firms can do business in these same countries.
	<b>Moderator:</b> Stephen M. Sammut, Senior Fellow, Health Care Systems and Entrepreneurial Programs, Wharton School, University of Pennsylvania, Venture Partner, Burrill & Company
	Lin Wang, Ph.D, Professor, Institute of Biophysics, CAS. CEO, Incubator for Protein Technology (Biotrand, Inc.), Executive Director, BioSino Bio-technology and Science, Inc
	Gad Berdugo, Founder, Explorium Capital Former Director and Sector Leader for global healthcare equity investment research at Lazard in New York
	David Frank, Managing Director MEDX Associates LLC

1:00 PM	Keynote lecture: An overview of the Medical Device Market
	David Cassak, VP/Content, Elsevier Business Intelligence
1:45	Networking Luncheon
2:30PM	
2.30111	Session 11: Capitalization of a life science Venture –Value inflection Points, Milestones and Capital Requirements, Alternative financing, Terms etc
	Financing a life science venture is challenging. When meeting with investors and prospective strategic partners, entrepreneurs will often hear questions that ask: Where are you in the value chain?" How does your business model reflect this?" "How do you describe your milestones and how are you managing towards them?" How do your milestones tie-in with your value inflection points?" This session will consist of a brief overview of typical value inflection points for each type of product, classical and alternative ways of financing, terms of financing rounds and more
	Moderator: Steve Levin, Editor-in-Chief/Medical Devices, Elsevier Business Intelligence
	Benny Zeevi, M.D. Managing General Partner, DFJ Tel Aviv Venture Partners
	Andy Weiss, President & CEO, CoAxia, former Vice President & General Manager of Medtronic Neurological
	John R. Lieberman, CPA/PFS Managing Director Perelson Weiner LLP
	Gad Berdugo, Founder, Explorium Capital Former Director and Sector Leader for global healthcare equity investment research at Lazard in New York
	Alon Sahar, Adv., Partner, Herzog, Fox & Neeman- Terms and agreements

Session 12: Venture Capitalists and Entrepreneurs – A complex Relationship
Benny Zeevi, M.D. Managing General Partner, DFJ Tamir Fishman Ventures
Bio - Break
Session 13: Incorporating Reimbursement in the Company Development Strategy
Moderator: Robert Goldberg, PhD, Vice President, Center for Medicine in the Public Interest
Lambert Van Der Walde, Former CMS liaison to VCs, start ups and Wall Street
Gaëtan Gicquel, Market Specialist Development, Reimbursement Department at MedPass
Andy Weiss, President & CEO, CoAxia, former Vice President & General Manager of Medtronic Neurological.
Session 14: Case Study: Participant presenting his\her case study
TBD
Cocktail Reception - Courtesy of Perelson Weiner LLP

	Day Three: Wednesday December 14, 2011		
	Day's Theme: Bringing the product to the market		
8:30 AM	Continental Breakfast		
9:00 AM	Session 15: Biopharmaceutical and Medical Device Licensing, Partnering and Strategic Alliances Format: Brief lectures, panel discussion, Q&A Major practical issues in formulation of partnering goals and managing different types of strategic alliances, preparation for positioning for partnering, identifying and qualifying prospective partners, making the approach, negotiation, closing the deal, with special emphasis on how to design alliances and avoid many potential problems and complications in managing these relationship.  Moderator: Benny Zeevi, M.D. Managing General Partner, DFJ Tel Aviv Venture Partners  Iddo Leshem, Country Manager Israel, BMS  David Frank, Managing Director MEDX Associates LLC  Ruben Krupik, CEO, Clal Biotechnology  Fredric D. Price, Chairman of the Board of Directors and CEO of Chiasma  Maya Racine - Netser, Adv, Partner, Head, technology licensing group in the High Tech Practice , Herzog, Fox & Neeman  Tom Duley, Of Counsel, DLA PIPER, concentrates on technology transactions for life sciences companies Discussion and Q&A		

11:30 AM	Bio - Break
12.00 PM	Session 16: Mobile Health Mobile devices and services are transforming the way people all over the globe live, work, play and now also revolutionize the way they receive medical care. Mobile devices are the most personal technology that consumers and healthcare providers own, and allows consumers to be introduced to new services quickly and intuitively and establish personal preferences. mHealth enable health and wellness to be delivered through mass personalization anywhere and anytime, in the comfort of patients' own homes and during daily routines. Many new players are entering the mobile health industry; it is highly fragmented market worth several billion of dollars. The adoption and deployment of mHealth requires new regulatory clarity, standards and interoperability of devices and software, new viable business models, consumers and providers cultural changes and proven evidence –based outcome measures, clinically and economically.  Quality and efficient healthcare delivery is highly depended on information and communication, anytime anywhere. The potential applications of mobile health, it's role in global health, new business models, the use of social media by pharma and medical device companies as well as by healthcare providers and insurance companies and regulatory issues will be discussed.
	Moderator and introduction: Benny Zeevi, M.D. Managing General Partner, DFJ Tel Aviv Venture Partners
	Claudio Yarza, Partner, PricewaterhouseCoopers   Kesselman & Kesselman
	Sonny Vu, Founder of AgaMartrix
	Hanan Gelbendorf, Co-founder, Managing Director, 2Creative, Buzz Hunter, Using Social Research to shape your marketing strategy
	Talya Miron –Shatz, PhD, Founding director, Center for Medical Decision Making, Ono Academic College, Teaches Health Consumerism at Wharton, CEO CureMyWay - Global Opportunities with Mobile Health

1:30 PM	Luncheon
2:30 PM	Session 17: Case study
	AgaMatrix, Sonny Vu, Founder
3:15 PM	Session 18: Intellectual Capital Management
	The goal of the session is to provide information and insight into the specific issues confronting investigators, entrepreneurs, investors and their patent attorneys. The session will address the formation of specific IP strategy and execution and using intellectual capital for competitive advantage. Content includes major issues confronting companies with US and filings in other jurisdictions related to biotechnology, e.g., patent ownership, non-obviousness rulings, the scope of what can be patented A VC will also provide an investor viewpoint.
	Moderator: Steve M. Sammut, Senior Fellow, Wharton Health Care Systems and Entrepreneurship
	Brian Hopkins, Member, Mintz Levin – IP Management
	Tom Duley, Of Counsel, DLA PIPER
	John R. Lieberman, CPA/PFS Managing Director Perelson Weiner
4:30 PM	Bio - Break
5:00PM	Session 19: The Persuasive Pitch, Part 2: Presentations Workshop Moderators: Steve M. Sammut, Senior Fellow, Wharton Health Care Systems and Entrepreneurship
	Benny Zeevi, M.D. Managing General Partner, DFJ Tel Aviv Venture Partners. Three to five participants will present revised versions of their introductions from Sunday before a panel of VCs and experts, and will receive feedback on both the content and spoken aspects of their presentations.

6:30 PM	Program Adjournment
	Session 20: Teams gather for "Take-aways Exercise"
	Each participant will receive at registration a work-sheet to record for each session one major lesson or "take-away." Teams will gather to discuss, compare notes, and develop one major take away for three sessions that will be assigned. Participants will have reviewed take-aways from Days 1 and 2 at the end of each day.

<sup>\*</sup> Changes in curriculum may occur