Business of Regenerative Medicine 2019 Defining and Creating Value

Register at: brm2019.hsci.harvard.edu/

Location: Harvard Business School, Aldrich Hall

Date: 15-16 July 2019

On July 15 & 16, 2019 at Harvard Business School, join us in exploring how advances in cell and gene therapy, drug development, and bioengineering in regenerative medicine are moving from the lab to the patient – and what it will take to identify real, lasting value for business and society.

Breakthrough technologies are thrilling in their novelty and can be transformative in their application, but regenerative medicine technologies defy the normal paradigms of both business model development and market-potential assessment. How does one 'define value' when considering such a new technology? How does one 'create value' when building a company on a novel platform? In today's market, how does one price such an innovation in different healthcare systems?

At the 12th annual Business of Regenerative Medicine: *Defining and Creating Value*, you will engage with CEO's, venture capitalists, experts in biomedical research, and patient advocates to make sense of this complex and shifting landscape. In two days of panel discussions, presentations, and networking, our distinguished speakers will provide insights – as well as guardrails – for navigating the emerging industry of regenerative medicine.

Agenda

Arrival | July 14 WELCOME RECEPTION

Guest speaker: George Q. Daley, MD, PhD*, Dean of the Faculty of

Medicine, Harvard Medical School

Location: 4:00-6:00 p.m. | Harvard Business School, Spangler Center,

Williams Room (Dr. Daley's remarks begin at 4:30 p.m.)

Day 1 | July 15 DEFINING VALUE

Aldrich Hall 112

BREAKFAST

8:00-9:00

Opening address: OPENING KEYNOTE | A SHARED MISSION: DISCOVERY,

9:00-9:30 **DEVELOPMENT, REPEATABILITY, AND COMMERCIALIZATION IN**

ACADEMIA AND BUSINESS

Mark Fishman, MD*, Harvard (formerly NIBR, MGH)

A shared mission: discovery, development, repeatability, and

commercialization in academia and business

Talk INVESTING IN TALENT TO SCALE YOUR COMPANY

9:30-10:15 Sarah Larson*, Third Rock Ventures

BREAK

10:15-10:30

Panel TURNING EARLY SCIENTIFIC VALUE INTO COMMERCIAL VALUE

10:30-11:30 State Government-Amritha Jaishanker, PhD*, MD Stem Cell Research

Fund

Academic funds – **Curtis Keith, PhD***, Blavatnik Accelerator Hospital venture – **Roger Kitterman***, Partners Innovation Fund Govt entity – **Keith Thompson***-UK Cell and Gene Catapult

Panel HOW IS VALUE DEFINED BY DIFFERENT TYPES OF INVESTORS?

11:30-12:30 Life Sciences VC – **Amir Nashat, ScD***, Polaris Partners

Corporate VC - **Jason Hafler**, **PhD***, Sanofi Ventures Corporate VC - **Sarah Larson***, Third Rock Ventures

Foundation – **Thomas Needham, MBA*** Broadview Ventures

LUNCH

12:30-1:30

Talk 1:30-1:40 INDUSTRY OVERVIEW

Janet Lambert*, CEO, Alliance of Regenerative Medicine

Panel GENERATING VALUE: WHAT DIFFERENT INVESTORS EXPECT

1:40-2:25 Moderator: Janet Lambert*

Financial markets: Whitney Ijem*, Guggenheim Securities

Big pharma: Imran Nasrullah, MS, JD, CLP*, Boehringer Ingelheim

Biotech: Matthew Gall, CFA*, Sarepta Therapeutics

2:25-2:30 INTRODUCTION OF THE ARM FOUNDATION FOR CELL & GENE

MEDICINE AND ITS ECONOMIC IMPACT STUDY David Smith*, Of Counsel, Pepper Hamilton LLP

Panel MEASURING VALUE – DEVELOPING A MACROECONOMIC MODEL

2:30-3:30 TO UNDERSTAND POTENTIAL IMPACT OF CELL AND GENE

MEDICINE ON HEALTHCARE SYSTEMS

Moderator: Morrie Ruffin*, ARM Foundation for Cell & Gene Medicine

Harvard Business School: **Amitabh Chandra, PhD***, HBS Pfizer Healthcare Innovation Center- **John Doyle, Dr.PH, MPH***

Harvard Pilgrim Healthcare - Michael Sherman, MD*

Evidera - Eric Faulkner, MPH*

Pepper Hamilton, LLP - David S. Smith, JD

BREAK

3:30-3:40

Closing address: **LEADERSHIP IN HIGH-RISK ENVIRONMENTS**

3:50-4:30 Nancy Koehn, PhD*, HBS

Move to HBS Spangler Center | Williams Room

RECEPTION

5:00-6:00

DINNER

6:00-8:00 PERSPECTIVES ON A DISEASE | RESEARCHER AND PATIENT

ADVOCATE

Jayaraj Rajagopal, MD*, (MGH, CF researcher) and Joan Finnegan Brooks* (CF patient advocate)

Day 2 | July 16 CREATING VALUE (case studies)

Aldrich Hall 112

BREAKFAST 8:00-9:00

Opening Address

9:00-9:30 TINY TECHNOLOGIES: BIG IMPACT

Sangeeta Bhatia, PhD*, MIT/BWH

Talk SUITING TECHNOLOGY TO BUSINESS MODEL AND FINANCING

9:30-10:00 Luk Vandenberghe, PhD*, MEEI – Akouos, GenSight, Odylia

Talk THE STEPS FROM ACADEMIC STUDIES TO SRA TO VENTURE

10:00-10:30 INCUBATION TO PUBLIC COMPANY

Jason Gardner, PhD*, CEO, President and Co-Founder, Magenta

Therapeutics

BREAK

10:30-10:45

Talk WHY REPLACE CELLS WHEN YOU CAN TURN THEM ON OR OFF?

10:45-11:15 Albert Edge,PhD*, MEEI– Decibel Therapeutics

Talk WHY USE CELLS WHEN YOU CAN USE THEIR OUTPUT?

11:15 – 11:45 **Steven Stice, PhD*** – ArunA Biomedical

Panel VALUE OF IN VITRO MODELS

11:45-12:30 **Vik Khurana, PhD***, BWH – Yumanity (*cells in a dish*)

Geraldine Hamilton, PhD*, – Emulate (organ on a chip)

Mark Skylar-Scott, PhD*, Lewis Group, Harvard – bioprinting and

organoids (vascularizing 3D models)

Discussion

12:45 - 1:15THE PROSPECTS FOR iPS-BASED THERAPIES-THE VIEW FROM

THE US AND JAPAN

Marcie Glicksman, PhD*, Orig3n Hiroto Bando, PhD*, FujiFilm

Panel

1:30 - 2:45HOW DO BIOMATERIALS WORK WITH CELLS AND GENES TO

PROVIDE BETTER SOLUTIONS?

Daniel Anderson, PhD*, MIT – Microencapsulation for Immune

Protection

Jennifer Elisseeff, PhD*, Johns Hopkins – Tissue regeneration

Paula Hammond, PhD*, MIT

Talk THE CEO'S PERSPECTIVE

2:45 - 3:15**Geoff MacKay*** Lessons learned from running a cell therapy company

(Organogenesis), and launching a gene therapy company (AvroBio)

Closing Address THE FUTURE OF REGENERATIVE MEDICINE - THE INTERSECTION

3:15-4:00OF GENETIC ENGINEERING AND CELL THERAPY

George Church, PhD*, Harvard Medical School

^{* =} confirmed participation