EMBA Elective Course B7731, Spring 2017
“Global Healthcare Strategy”
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Instructors

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Description

This course will examine innovative strategies in the global life sciences and health services industries. As context, the structure of health care systems in different countries will be reviewed, focusing on population health status, healthcare in the total economy, and the structure of the country’s healthcare industry. A wide range of countries will be covered including the U.S., U.K., Russia, Dubai, India, China, and Haiti and others.

Course Learning Objectives

- Analyze need for innovation in life sciences and health services including role of finance, reimbursement and technology innovation
- Study innovative business models in global markets
- Identify future opportunities for investment and career growth
Connection to the Core

The learning in this course will utilize, build on and extend concepts covered in the following core courses:

<table>
<thead>
<tr>
<th>Core Course</th>
<th>Connection with Core</th>
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<tbody>
<tr>
<td>Corporate Finance</td>
<td>1. Time Value of Money</td>
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<td>2. Risk</td>
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<td>3. Firm Valuation Model</td>
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<tr>
<td>Decision Models</td>
<td>1. Decision Making Under Uncertainty and Risk</td>
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<td>2. Sensitivity Analysis</td>
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<td>3. Modeling Competitive Effects</td>
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<td>4. Modeling in Practice</td>
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<tr>
<td>Managing Marketing Programs</td>
<td>1. Innovation, New Products</td>
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<td>2. Pricing</td>
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<td></td>
<td>3. Integrated Marketing Communications</td>
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<tr>
<td>Marketing Strategy</td>
<td>1. Company Analysis</td>
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<td>2. Customer Analysis</td>
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<td>3. Competitive Analysis</td>
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<td>4. Market Penetration and Marketing Strategy</td>
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Format and Approach

This course promises to be intellectually stimulating and challenging. Class participation will be critical for the students, and we will constantly seek to relate the information and ideas discussed in the classroom to issues currently confronting companies, investors and entrepreneurs in this sector. Understanding/experience in the healthcare, venture capital, and/or technology sectors will be highly valuable. Students will benefit from attending the first class session to understand material to be covered in later stages of the course.

Student focus: Students who plan to work in any of the following segments of the health care field should find this course to be valuable:

- Pharmaceutical, biotechnology, and medical device companies
- Health insurance companies and managed care organizations
- Hospitals and physician practices
- Financial services focused on health care
- Public and not-for-profit organizations focused on health care
Core Culture
This course adheres to Columbia Core Culture. Students are expected to be:

- Present: (1) On time and present for every session; (2) Attendance tracked
- Prepared: (1) Complete pre-work needed, expect cold calling; (2) Bring nameplates
- Participating: (1) Constructive participation expected and part of grade; (2) No electronic devices unless explicitly called for by the instructor

Course Topics

The course will cover:

Life sciences:
- Pharmaceuticals
- Biotechnology
- Medical devices
- Diagnostics

Health insurance, payments:
- The decline of traditional commercial insurance
- The growth of public third party insurance in a range of countries
- Accountable Care, Delivery System Reform, Value Based and related topics in Population-based health services
- Provider-sponsored health insurance
- Public-private interface in providing benefits, from a global perspective

Health services:
- In the US, the impact of Medicare, Medicaid and private health insurance on professional and institutional health services
- Internationally,
  - Physician-hospital competition and coordination
  - Healthcare information technology, promises and problems
  - Ambulatory and acute healthcare
  - Long term care, a global management challenge
  - Limits on services, regulatory, professional, cultural, economic

The course will focus on ensuring students understand critical components of innovative healthcare business models, internationally, including the:
- Key drivers of change in life sciences and health services
- Strategic challenges and opportunities to improve healthcare
- Role of technology in innovation
- Investment models and key actors
- Role of various stakeholders, including consumers / patients
- Cost, pricing and reimbursement
• Role of government regulation
• Legal and intellectual property
• Infrastructure to enable health care and wellness

Innovative Business Model:

The class will utilize a consistent business model framework across sectors to profile, evaluate and recommend changes to the innovation strategies of for-profit and not-for-profit healthcare entities.

This framework will allow students to deepen their understanding of what drives and sustains innovation as countries explore creative ways to solve their healthcare problems around access, quality, cost, patient experience and manufacturing and how these imperatives are balanced with investment returns and risks.

Class format will be lectures, readings, and case studies with senior executive guest speakers. Students will be asked to monitor current events in global healthcare and each student will have an opportunity to share their insight and lead discussion on a healthcare/life sciences current event.

Assignments:

Participation: Class discussion, case analysis and current events. (30%)
Mid-term: Individual assignment: Two to three short essay questions comparing and contrasting healthcare innovation models in two or three markets based on lectures, readings, case studies and guest lectures. (30%)
Final: Individual assignment that also can be fulfilled in a small group project: Short report and class presentation featuring an insightful analysis of innovation models and their impact on healthcare quality, cost and patient access. (40%)
Required Course Materials:

Reading list will be provided by the first class and a key reading will be assigned in advance for each respective class.

Inclusion, Accommodations, and Support for Students:

At Columbia Business School, we believe that diversity strengthens any community and brings it greater success. Columbia Business School is committed to providing all students with the equal opportunity to thrive in the classroom by providing a learning, living and working environment free from discrimination, harassment, and bias of the basis of gender, sexual orientation, race, ethnicity, socioeconomic status, or ability. Students seeking accommodation in the classroom may obtain information on the services offered by Columbia University’s Office of Disability Services online at www.health.columbia.edu/docs/services/ods/index/html or by contacting (212) 854-2388.

Method of Evaluation:

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<td>Participation</td>
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<tr>
<td>Final</td>
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Course Schedule

**Class 1: Friday, January 6, 2017, 8:30-11:30 a.m.**
Course Overview, Global Life Sciences and Health Services Trends, Strategy Framework


Overview of global trends in health services and life sciences. Overview of healthcare/life sciences ecosystem and how industry works in integrated networks and processes. Insights on role of technology in disrupting healthcare access, treatments, services and delivery, globally.

Review of a strategy framework for profiling and evaluating innovative global health care services and life sciences business models

Instructors
Lorraine Marchand
Fred Hyde
Mike Lovdal
Class 2: Saturday January 7, 2017, 3:45-6:45 p.m.
Global Innovation in Biopharmaceuticals and Devices
New models of drug development, including the promise and reality of precision medicine; the role of the patient in pharmaceutical development, disease management, prevention and outcomes; role of small biotech, new business models and new actors; private/public partnerships.

Diagnostic and medical devices overview, including regulation in the E.U. and the U.S.

Instructors
Lorraine Marchand

Guest speakers:
Arda Ural, formerly marketing, Pfizer, currently principal E&Y. Global pharma investment strategies

Class 3: Saturday, January 21, 2017, 8:30-11:30 a.m.
The Changing Health Services Landscape in the US and beyond
Part I: Consumer Enablement and Engagement.
The eight voices of the global healthcare consumer; emerging consumer technologies and innovative business models.

Instructors
Mike Lovdal
Fred Hyde

Guest speakers
John Larew, SVP Health Products and Services, AARP
Shahram Ebadollahi, SVP Consumer Technologies, IBM Watson Health

Class 4: Friday, February 3, 2017, 3:45-6:45 p.m.
The Changing Health Services Landscape (Part II) US and beyond including UK and Australia; Value-based Healthcare and Population Health Management.
The movement to new methods of payment and outcomes measurement

Instructors:
Fred Hyde
Mike Lovdal

Guest speaker
Niyum Gandhi, Executive Vice President, Population Health, Mt. Sinai Hospital
Transforming a major health system
Class 5: Saturday, February 4, 2017, 3:45-6:45 p.m.
Global Innovation in Biopharma and Medical Devices, continued
Lecture will focus on comparison/contrast Russia/EU with US and other markets with respect to innovations, cost, regulatory policies, and market access. Will share insights on effective lean governance model with different licensing partners

Instructor
Lorraine Marchand

Guest speakers
Mikhail Samsonov, MD, PhD, Chief Medical Officer, R-Pharma, vertical integrated specialty care pharma in Russia and Adrian McKerney, Chief, Business Development, IMSHealth/Quintiles

Class 6: Friday, February 24, 2017, 12:30-3:30 p.m.
2017: Possible Changes in U.S. Health Policy
The 2016 reconciliation bill, MACRA reforms, legislative initiatives in pharmaceutical price controls. Evidence concerning the impact of ARRA’s and PPACA’s innovations five years in (ACOs, VBP, MU and HER). Changes proposed by the new Trump administration.

Interest groups: What change do they want in 2017, with what potential consequences for investors and entrepreneurs?

Instructors
Fred Hyde
Mike Lovdal

Guest speaker
Michael Weissel, EVP Global Development, Optum
Class 7: Saturday, February 25, 2017, 12:30-3:30 p.m.
Healthcare in Europe and the Middle East
Overview of healthcare in four European countries – population health status, health economics, health industry structure

Overview of healthcare in the Middle East

Instructors
Fred Hyde
Lorraine Marchand

Guest Speaker
Marc Choufani, ’06, Managing Director, OLEA
Establishing the Cleveland Clinic in Abu Dhabi

Class 8: Saturday, March 11, 2017, 12:30-3:30 p.m.
Healthcare in Asia

Overview of healthcare in Japan, Singapore and Indonesia – population health status, health economics, health industry structure

Overview of strategies in vaccine development and distribution

Instructors
Lorraine Marchand
Fred Hyde
Mike Lovdal

Guest speakers
Elo Kent, Chief Innovation Office, Santen Pharmaceutical: Pharma innovation in Japan
Hartadinata Harianto, Establishing a hospital chain in Indonesia
Speaker from CBS Center on Japanese Studies
Class 9: Saturday, March 25, 2017, 8:30-11:30 a.m.
Healthcare in Asia II

Overview of healthcare in India and China – population health status, health economics, health industry structure

Instructors
Lorraine Marchand
Fred Hyde

Guest speakers
Roberta Lipson, ’78, CEO of Chindex
Development of Private Hospitals in China

Thulasarji Raville, COO, Aravind Eye Hospital, India
Industrial-Model Medicine-the Development of Scale and Reduction of Cost”

Nalini Salingram, CEO, Arrogya Health, NGO India

Class 10: Saturday, April 8, 2017, 12:30-3:30 p.m.
Healthcare in the developing world

Overview of healthcare in developing countries - population health status, health economics, health industry structure

Guest speakers
Connor Shapiro, CEO, St. Boniface Haiti Hospital

Latanya Mapp, Executive Director, Planned Parenthood Global

Paula Annunziato, MD, VP and TA Head, Vaccines Clinical Research, Healthcare and Vaccines in Africa and other Underserved Region

Instructors
Lorraine Marchand
Fred Hyde
Mike Lovdal
Class 11: Friday, April 21, 2017, 8:30-11:30 a.m.
Central and South America: Brazil and Mexico

Guest speaker
Neal Masia, Pfizer

Instructors
Lorraine Marchand
Fred Hyde
Mike Lovdal

Class 12: Saturday, April 22, 2017, 3:45-6:45 p.m.
Student presentations, application of the Innovative Business Model Framework to a specific client/issue assigned

Instructors
All