## Leadership in Innovation and Entrepreneurship Lecture



## Academic Entrepreneurs, New Technologies, and **Building Companies to Treat** Disease

: 13 November 2017 (Monday)

Time: 4:00pm-5:30pm

Venue: Connie Fan Multi-media Conference Room

4/F Cheng Yick-chi Bldg.,

**City University of Hong Kong** 

Prof. Harvey F. Lodish is a Founding Member of the Whitehead Institute for Biomedical Research and Professor of Biology and Professor of Biological Engineering at the Massachusetts Institute of Technology.

He is a Member of the National Academy of Sciences and a Fellow of the American Academy of Arts and Sciences. Prof. Lodish is a member of the Board of Trustees of Boston Children's Hospital, where he is Chair of the Board of Trustees Research Committee. From 2008 to 2016 he was the Founding Chair of the Scientific Advisory Board of the Massachusetts Life Sciences Center, the group charged with oversight of the state's 10- year \$1 billion investment in the life sciences. He was a founder and scientific advisory board member of several companies including Genzyme, Inc., and Millennium Pharmaceuticals, Inc., and has served on the scientific advisory boards of numerous biopharmaceutical companies.

## Abstract

Current research is enhancing our understanding of the genetic, molecular, and cellular bases of many human diseases, especially rare diseases. Translating these discoveries into actual drugs and diagnostics requires establishment of for-profit companies and often depends on entrepreneurial academic researchers as well as patient and disease based organizations. New types of therapeutics are entering clinical practice, including cell therapies and gene therapies. Together, these provide opportunities for understanding and treating heretofore-untreatable diseases.

I will begin by describing my own experiences in helping start Genzyme and Millennium, focusing on the development of an enzyme replacement therapy for Gaucher Disease. More recently I was the scientific founder of Rubius, a Flagship Pioneering company that uses gene-modified red blood cells, produced in culture, to treat many diseases. I will focus on Rubius' first product, a therapy for phenylketonuria (PKU), as well as work from my own laboratory on the use of modified red cells to treat autoimmune disorders. I will also discuss several companies that have become successful by developing drugs to treat specific rare diseases.

I will review significant fundamentals for starting and developing successful biotech companies, including the importance of geographical proximity of research universities and hospitals with a Department of Biomedical Sciences cluster of biotech companies and venture capital firms. I will stress the importance of an Enquiry: Dr Minh Le (3442-2485) / entrepreneurial faculty and a top scientific advisory board and board of directors. Having experienced biopharmaceutical leaders is essential, as is proprietary and protected intellectual Email: bms.event@cityu.edu.hk property and a solid business plan. Additionally, one needs solid financial backing, usually by venture capital but often by patient support groups, as well a supportive infrastructure including a helpful government and regulatory environment.

## Registration:





Ms Irene Wong (3442-4707)

Organizer:

Department of Biomedical Sciences Co-Organizer:

City University of Hong Kong

Supporting Co-Organizers:





