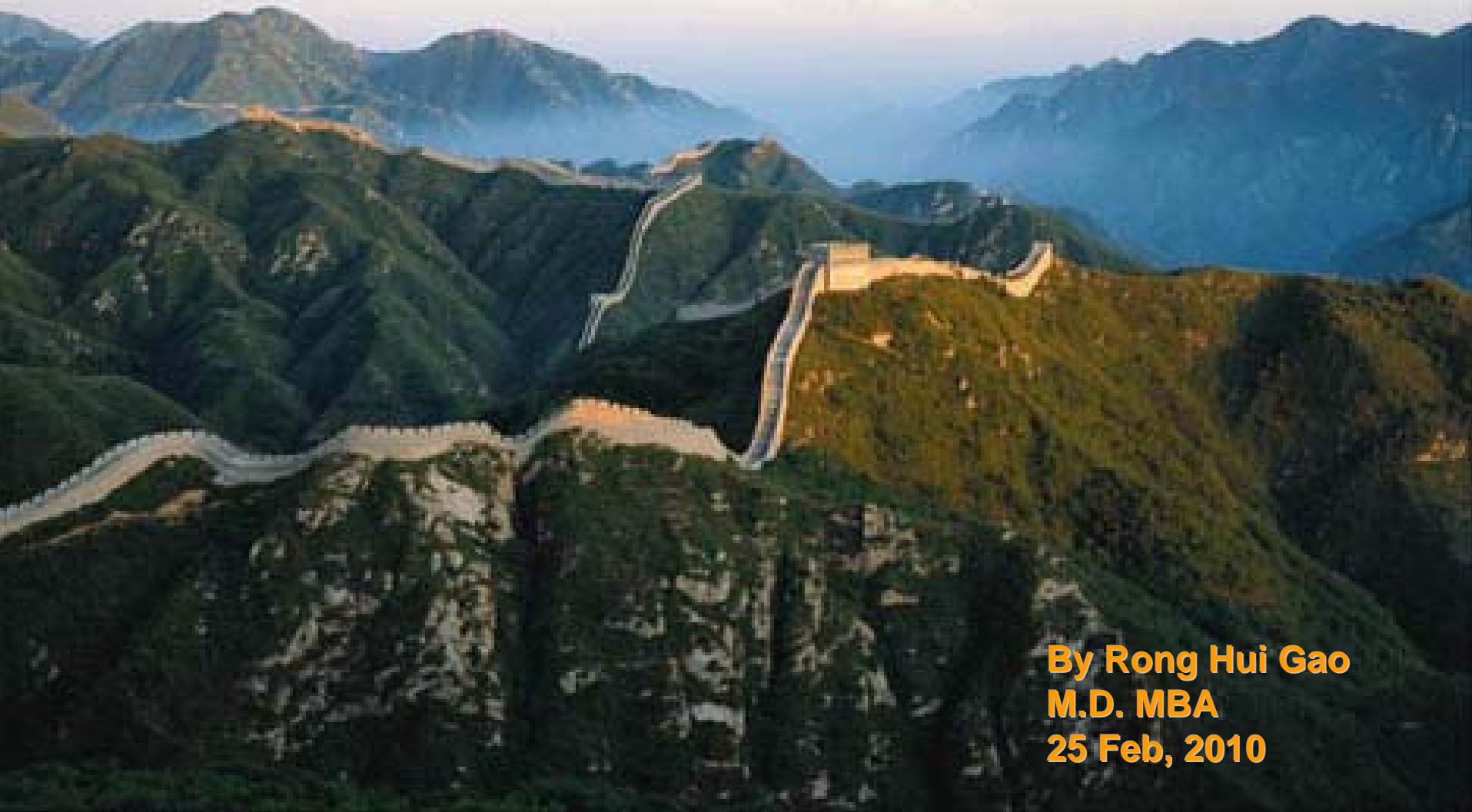


# Break the cultural Great Wall



**By Rong Hui Gao  
M.D. MBA  
25 Feb, 2010**

# East Meets West



礼  
Respect

信  
Trust

求同  
Homogeneous

关系  
Relationship

领导力  
Leadership

创新  
Innovation

求异  
Individuality

信誉  
Credibility



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# China Healthcare Market Overview

- 5% of GDP spent on healthcare
- Government stimulus bill: \$125bn on medical reform over next three years (2013)
- 90% of people covered by some form of insurance by 2011
- Pharmaceutical market is expected to continue to grow by 20+ percent pace annually, and contribute 21 percent of overall global growth through 2013
- Become the third largest drug market by 2011(IMS Health)

## Main Drivers of the Market Growth

- Population 1.35bn by 2010
- Urbanization 45% vs. 55% 2010
- Aging population 352m over 68yrs 2010
- More affordable, 300M middle class
- Over 30m with diabetes; 160m with hypertension
- 300k die of liver cancer; 1m people die of lung cancer per year
- Lifestyle:
  - Fat energy supply <30% WHO recommended level
  - Account 1/3 of 1.3bn smokers worldwide
  - Young and middle class Chinese are more westernized in lifestyle

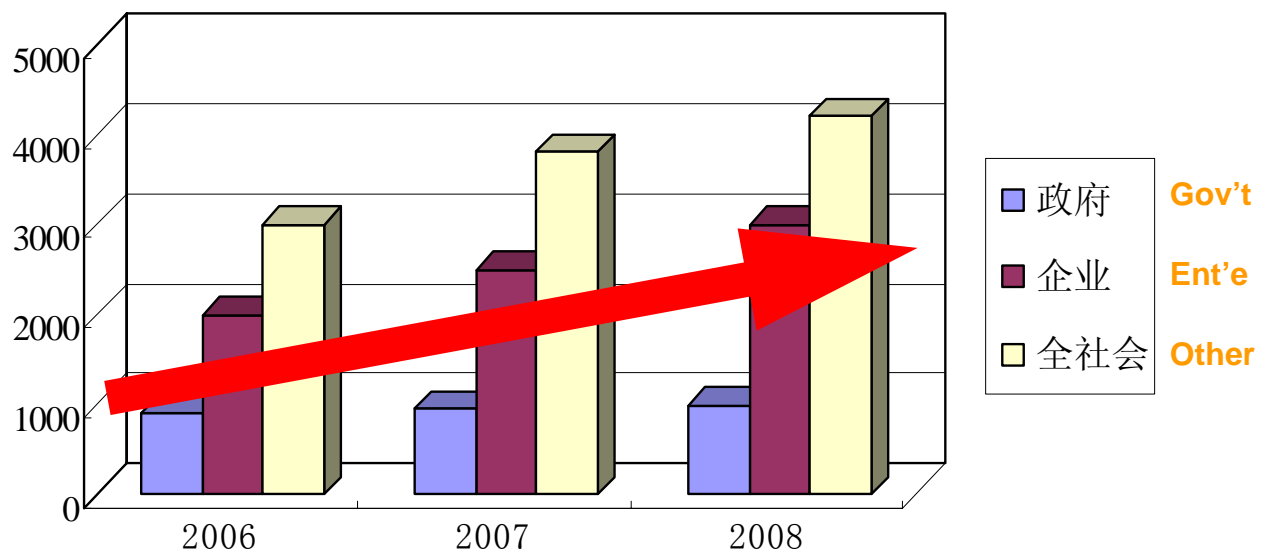
# Main Factors Driving Chinese Research

- Government initiative to improve innovation
- More Government funds and favorable policies for R&D
- Fast growing healthcare market demands for better care
- Huge number of returnees in life science sector
- Global economic downturn leads to slow VC investment
- Pharmaceutical companies restructuring increasing outsourcing
- Low operation cost and local talents attract R&D and collaborations

# Government Support

- Central Government Level
  - Ministry of Science and Technology (MOST)
  - Ministry of Health (MOH)
- Provincial//Municipal Level
- Life Science Parks (50+)
  - BioBay, Suzhou
  - Shanghai/Beijing
- Institutes/Universities (+200)
  - China Academy of Sciences (CAS)
  - China Academy of Medical Sciences (CAMS)

## R&D Investment Increase



The First 3 Years of the 11th Five-Year Plan:

**Annual Growth  
Rate 21%**

**RD/GDP  
1.52%**

**Ranking 5<sup>th</sup> in  
the World**

Source: MOST

# National Major S&T Projects

- **Genetically modified new bio-products**
- **Innovative potential mega drug development**
- **Prevention and treatment of major infectious diseases, such as HIV/AIDS and Hepatitis**

# National Basic Research Program (973)

- Agriculture
- Energy
- Information
- Resource and Environment
- Population and Health
- Material
- Interdisciplinary subjects
- Frontier Research

<http://www.973.gov.cn/English/AreaList.aspx>

Source: MOST

# National High-tech R&D Program (863)

- Information technology
- Biological and medical technology
- New materials
- Advanced manufacturing technology
- Advanced energy technology
- Resource and environment
- Marine technology
- Modern agriculture technology
- Modern Transportation technology
- Earth observation and Navigation technology

[http://www.most.gov.cn/eng/programmes1/200610/t20061009\\_36225.htm](http://www.most.gov.cn/eng/programmes1/200610/t20061009_36225.htm)

## Mega New Drug Development Program

First China government program dedicated solely to drug development

- Program led by MOST and MOH
- More than \$12B available over 5 years  
Oncology, CVD, CNS, diabetes, immunology, infectious disease
- Funding distributed now through 2013  
Almost \$800M granted to 121 projects by May 2009  
Grants range from <\$1M to nearly \$200M

## Government Biotech Focus during 11th Five-Year Plan

- Genomics/proteomics
- Stem cells and cloning
- Tissue engineering
- New drug discovery
- Bioinformatics
- Bio-chips
- Industrial biotechnology
- Nanotechnology
- Personalized medicine
- Vaccines

# TRANS-BORDER “BRIDGE”



# CRO in China

- **Over 400 CRO companies** (大众医药网)
- **Market size \$260m in 2008, predicated \$430m in 2010 (PWC)**
- **Discovery chemistry:**
  - Explosive growth last six years resulted in leading companies: Wuxi Pharmatechs, ShangPharma, Pharmaron, BioDuro, Sundia, etc
  - Climbed up the value chain swiftly, from lower end synthetic chemistry to high-end integrated medicinal chemistry
- **Preclinical and biology**
  - Early develop stage but poised for major growth
  - Established Western CRO entering JV in China
  - CRL/BioExplorer, MPI/Medicilon, Wuxi, Covance
- **Clinical:**
  - Most MNC placed global trials to China in spite of serious regulatory hurdles
  - Established Western CRO ramping up/acquiring local CROs.

# Opportunities

## Sectors

- Biologics CMO
- New drug development
- Preclinical/Clinical CROs
- Diagnostics
- Vaccine
- Medical devices
- Venture capital

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## Skills and experiences

- Innovation
- Project management
- Quality assurance
- Process
- Commercialization
- Interdisciplinary skills

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# Cultural Difference

East **vs.** West

Intricate **vs.** Extricate

Dependent **vs.** Independent

Following **vs.** Creative

Respect **vs.** Leadership

Practical **vs.** Interest driven

Personal relationship **vs.** Credibility

Strong work ethic **vs.** Balance between life and work

# How to work successfully in China (for SME)

- Develop feasible business model to fit the local market
- Identify right partners
- Integrate into the local culture
- Develop healthy relationship with government
- Effective Communication both internally and externally
- Maximize benefits from government and market in all level
- Be flexible

## How to work successfully in China (Scientists)

- Good understanding of local culture
- Well connected through network
- Good communication with local staff
- Be adaptable and patient
- Positive attitude

# Chiral Quest

**A successful case  
in BioBay**

# Chiral Chemical CMO

- Founded by Chinese professor in US
- Series A: CSVG US\$3.5M for MBO, Series B from KPCB, CRCI, JAIC, I-China close at August 2008.
- 370 sqm → , 24000 sqm  
built-to-lease & buyout option  
(Oct. 8 2008 - Jun., 2009)
- SIP leading talent: Start-up fund \$143,000, housing \$143,000



# Government Financial Support

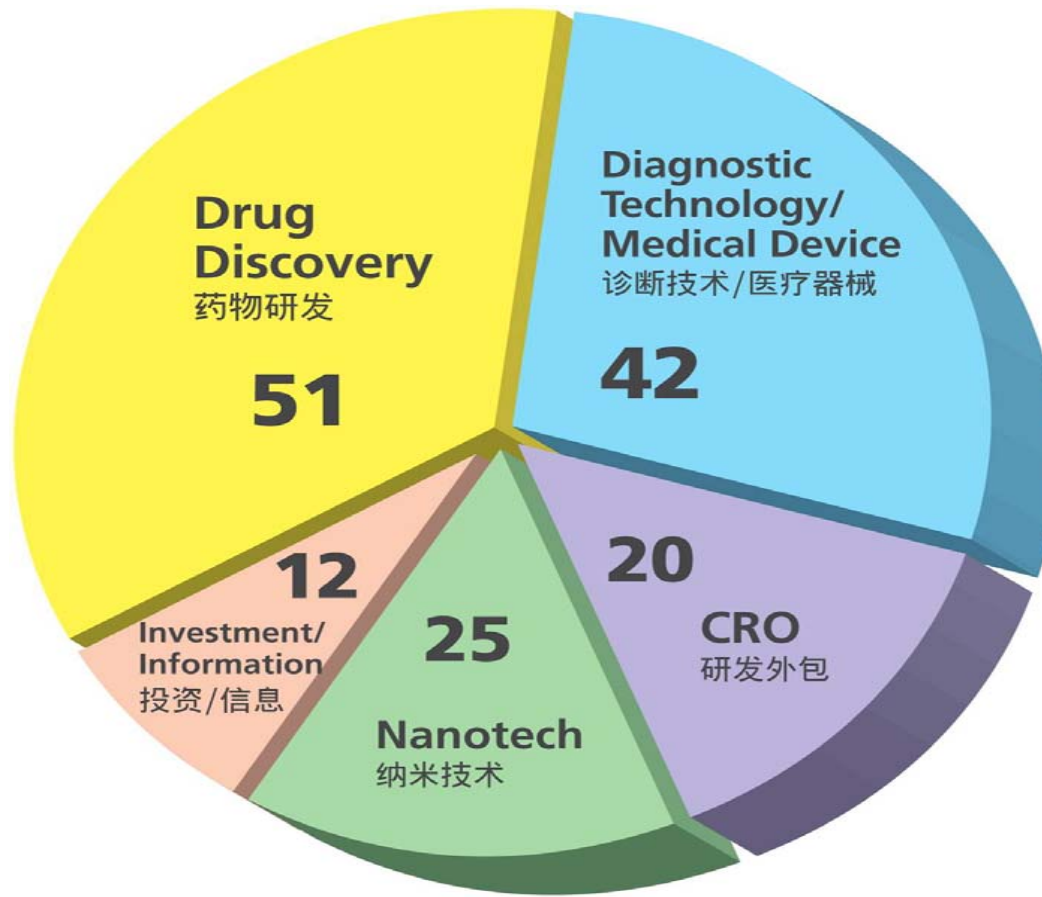
- **Government generous incentives**
  - Start-up funds
  - Leading Pioneer grants
  - High-tech project grants
  - Talent relocation subsidies
  - Favorable rent for R&D sites
  - Loan guarantee
  - Tax credits
  - Follow-up financing

# BioBay

**A leading life science & nanotech cluster in China**



# Emerging Bio and Nanotech Cluster



# Dushu Lake Science & Innovation Zone



Soochow University



爱尔兰列墨瑞克大学  
University of Limerick, Ireland



*innovation comes home*

**Thank you!**

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**Q & A**

**30 minutes**

Upcoming Event:  
March 4, 2010. 2-3pm ET



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