



IP Challenge in Open Innovation between Academia and Industry

JPMA

Intellectual Property Committee

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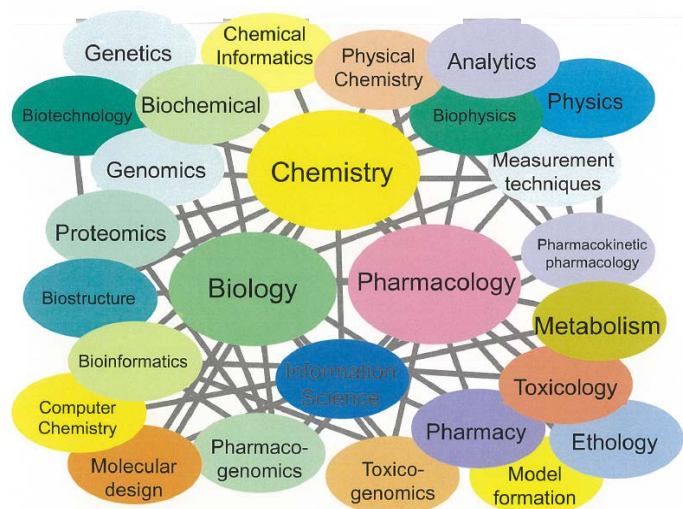
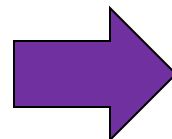
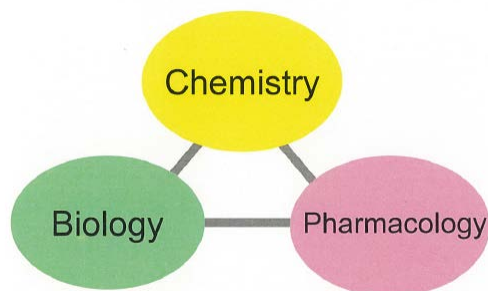
1. Requirement for Open Innovation

1) Success Rate of New Drug Development

1989~1993: 1 / 3,700

2008~2012: 1 / 29,699

2) Discovery Model Change (diversified/complicated)



1. Requirement for Open Innovation

3) Seeds from Academia /Biotech (1998–2007)

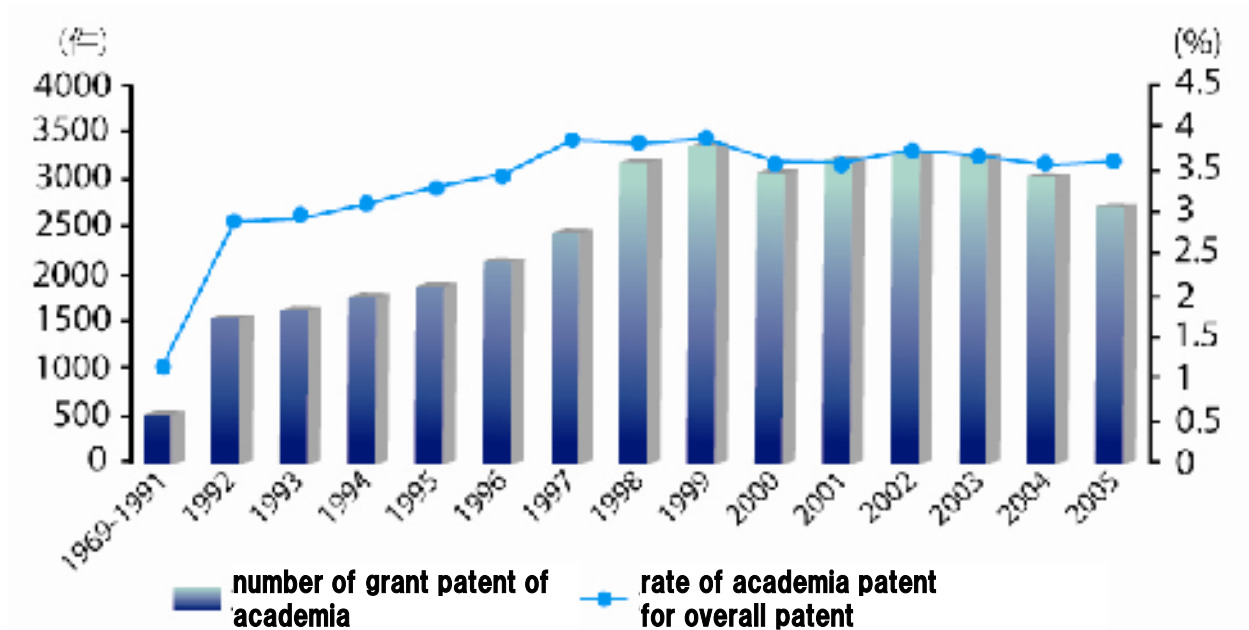
NME approved by FDA (1998–2007)

NME division	Number of approved drug	Origin	
		Pharma Industry	Academia Biotech
NME from WW	252	58%	42%
NME from US	118	38%	62%
NME from JP	23	81%	19%

Nature Reviews Drug Discovery, November, 2010
Robert Kneller, J.D., M.D., M.P.H. (RCAST)

2. Intellectual Property at Academia

Patent at Academia in U.S.

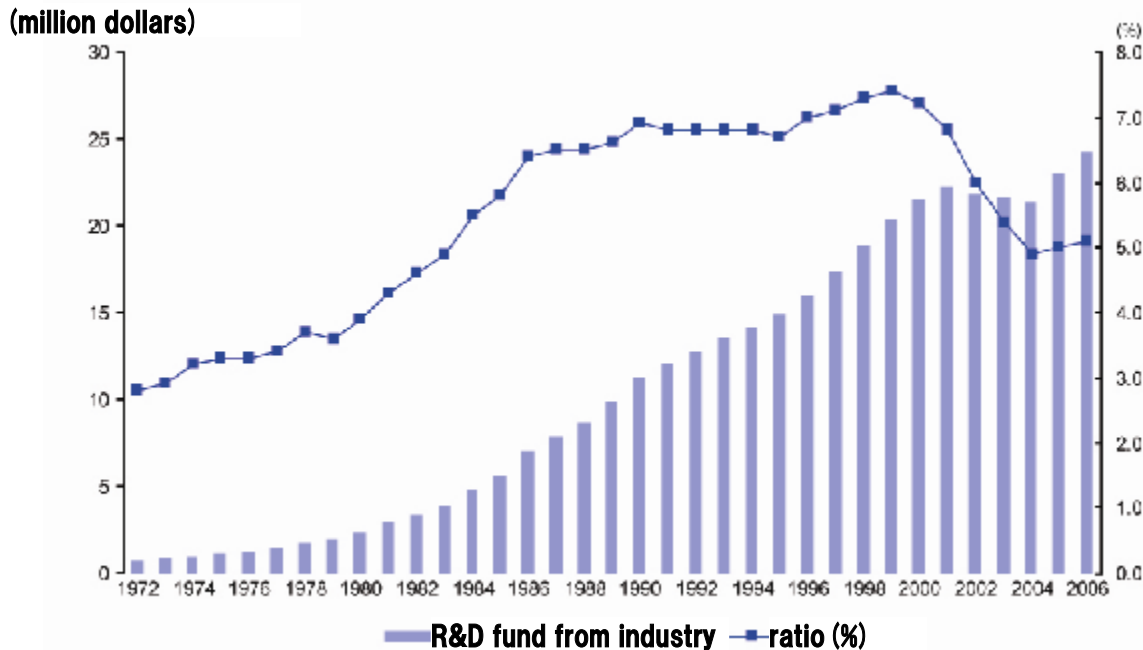


(Washington Core, 2008 based on USPTO data)

- the Bayh-Dole Act (from 1980)
- ✓ Quality of patent at academia, Prosecution cost

2. Intellectual Property at Academia

Collaboration between Academia and Industry in U.S.



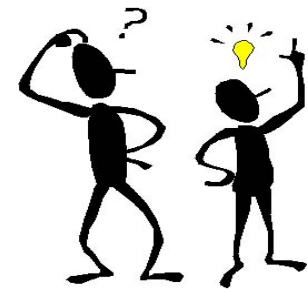
(Washington Core, 2008 based on National Science Board data)

- Access to basic /cutting-edge research
- ✓ Ownership of IP, License terms

3. Key point on IP under Collaboration

(1) Patent is a tool for business

- **First priority is making a new drug**
- **Patent is utilized as a vehicle to organize our activity and provide medicine for patients all over the world.**



3. Key Point on IP under Collaboration

(2) Mutual understanding and reliance

- **No rule on terms and conditions for alliance**
- **Commitment to Goal Setting**
- **Contribution and Business merit**

ex. Alliance of Academia-Pharma industry
Takeda-CiRA (Kyoto Univ.) ; T-CiRA



4. Cross Border Collaboration in Asia

Concerns of Asian countries

- **Patent system is somehow fear**
- **Force of developed countries rule**

Concerns of Other countries

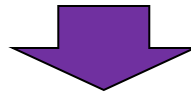
- **Not enough patent system in some countries**
- **Free ride without patent protection**
- **CBD-ABS on research for Genetic Resource**



5. Provide Innovative Drug by Alliance

Collaboration utilized each Strength

- **Local Industrial Development with Strength (Genetic Resource) through cross boarder collaboration**
- **Synergetic effect for drug discovery is essential**
IP is a vehicle to accelerate for drug discovery



Provide innovative drug to people in Asia



Thank you for your attention!