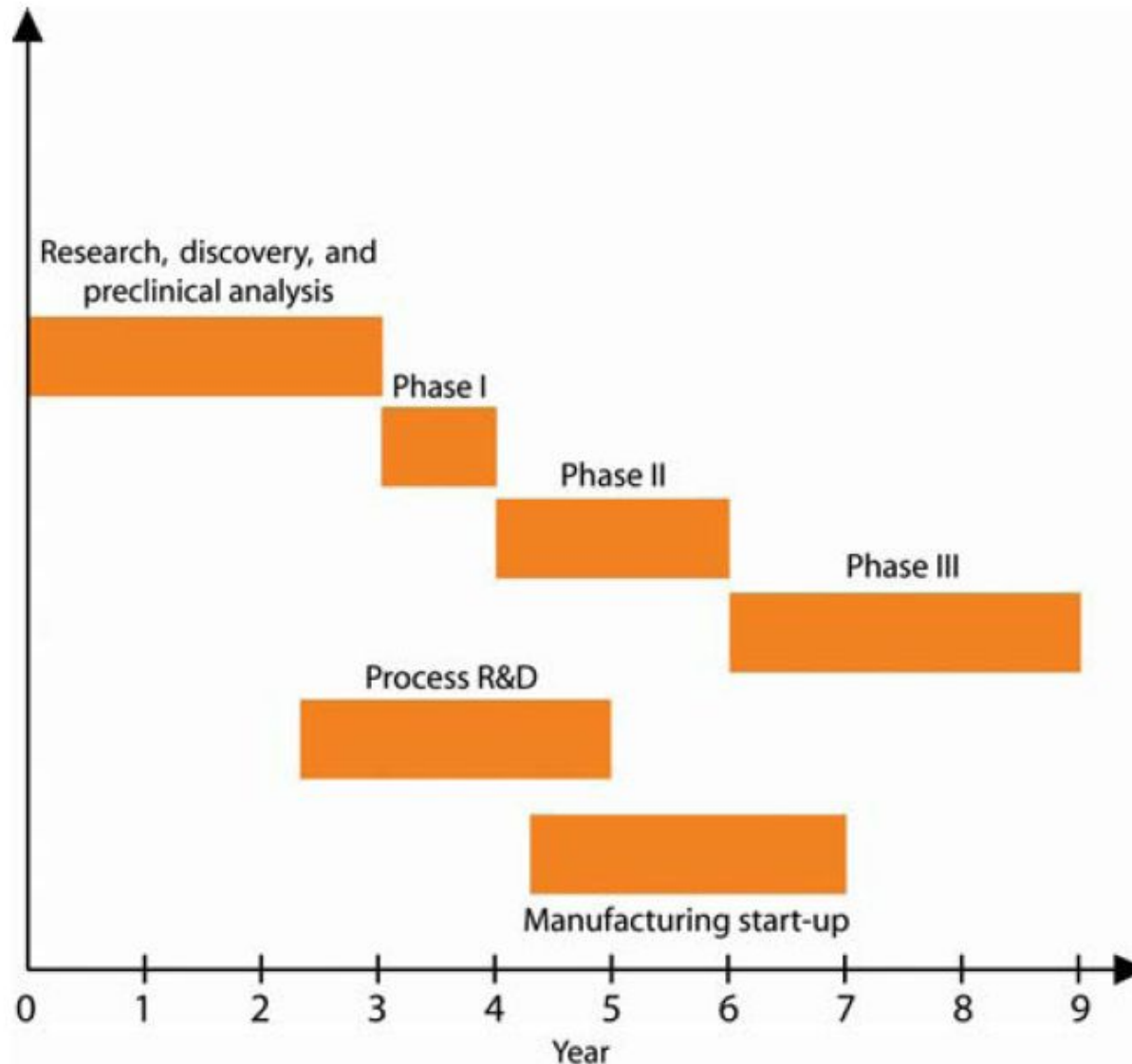


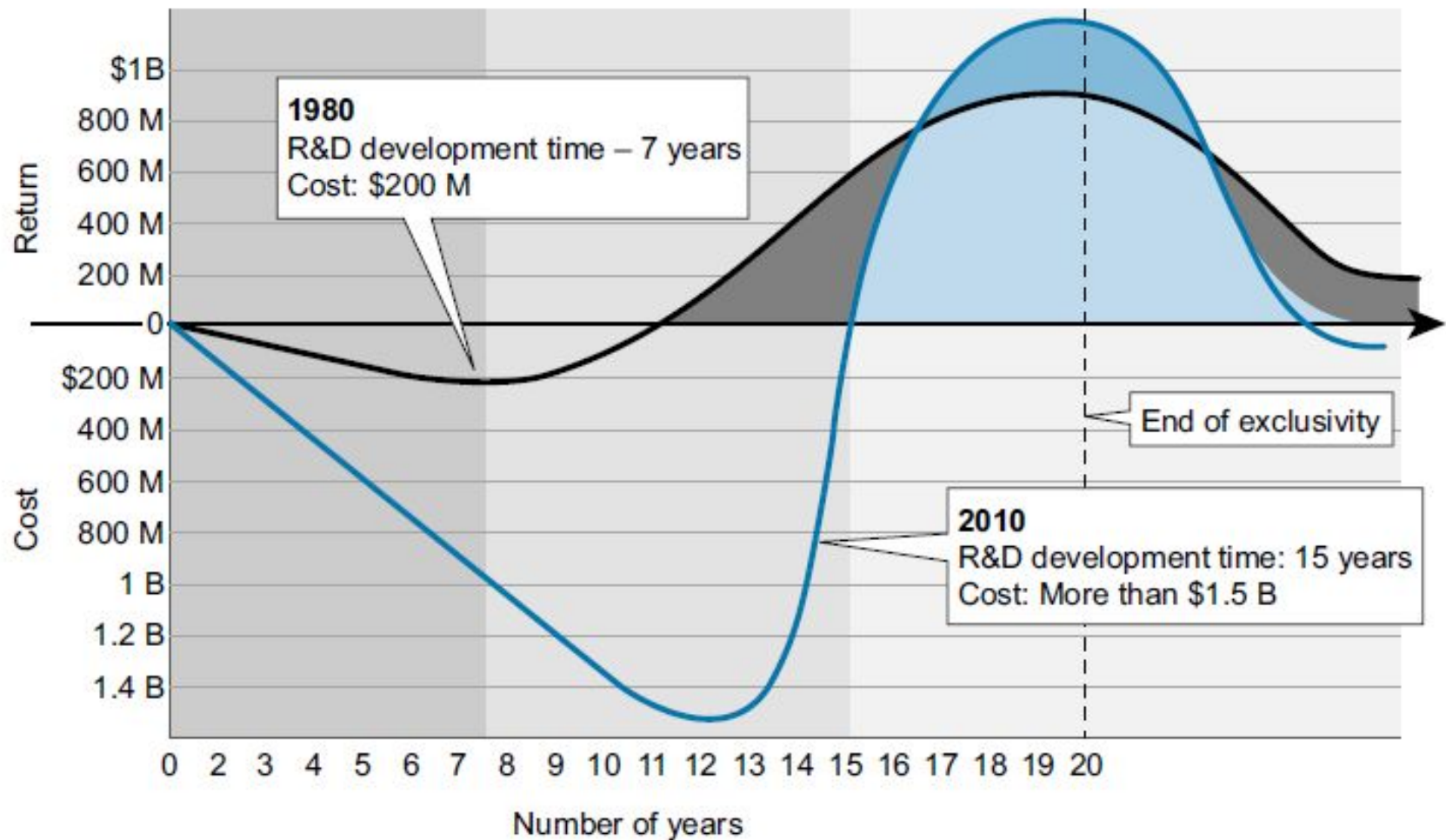
# **BIOTECH BUSINESS: FUNDING OPPORTUNITIES**

# PRODUCT DEVELOPMENT CYCLE FOR A DRUG



# BIOTECHNOLOGY BUSINESS:

## Time to recover R&D costs are being compressed



# **THE VALUE OF THE BIOTECH COMPANY'S ASSET varies with market and geographic region**



# **THE SAN FRANCISCO BAY AREA**

## **a major biotechnology cluster**





# **THE BOSTON/CAMBRIDGE**

## **a world-top biotechnology cluster**



# **BioBAT AT BROOKLING ARMY TERMINAL** **a biotechnology incubator**





# SILICON VALLEY





# MEDICON VALLEY



mediconValley  
MEDTECH ORGANISATIONS

# **WHAT IS A BIOTECH CLUSTER?**

**Abundance of high quality, adequately funded academic research**

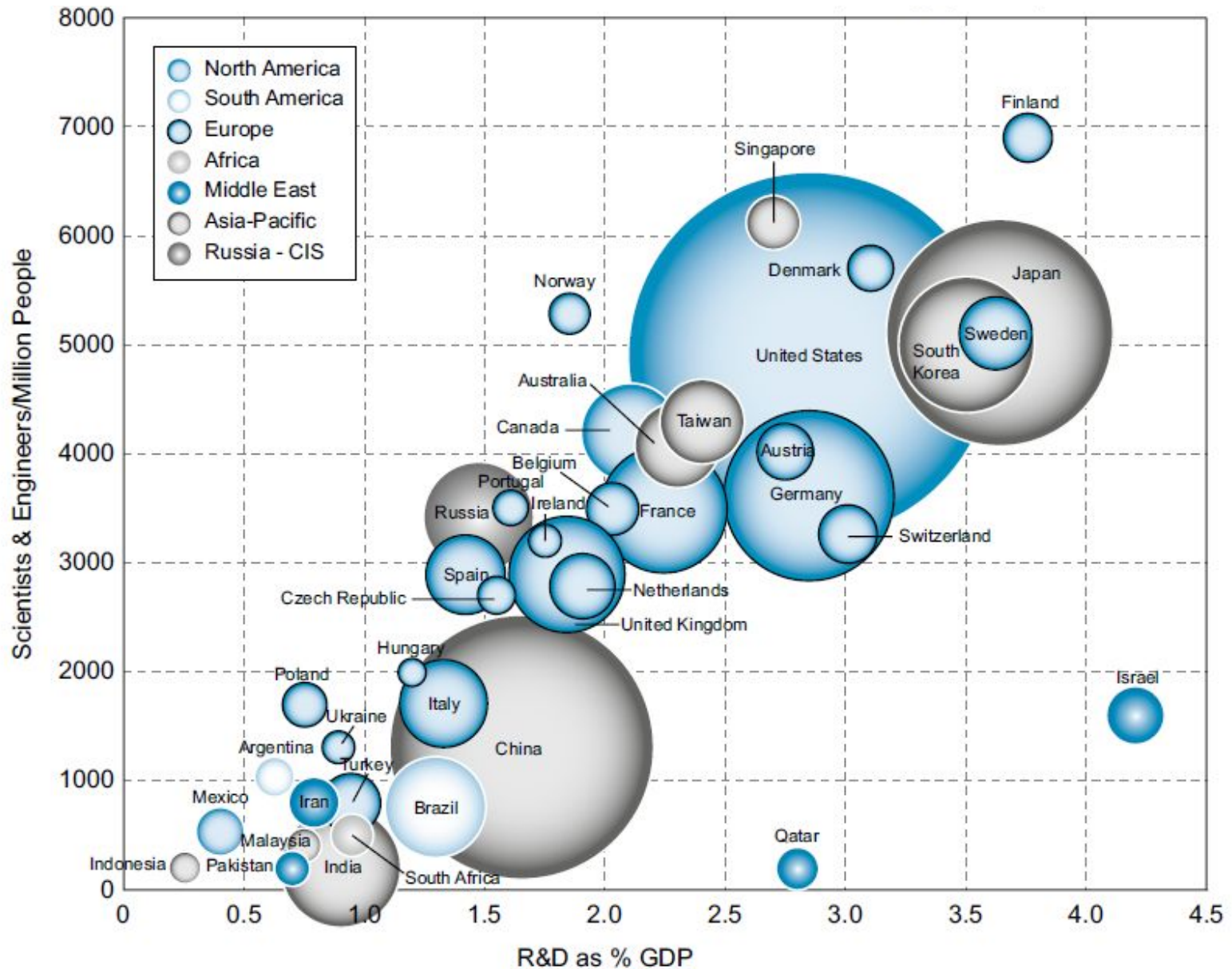
**Ready resource of seasoned and experienced biotechnology entrepreneurs**

**Ready access to sources of at-risk, early and development-stage capital willing to fund start-up concepts**

**Adequate supply of technically skilled workforce experienced in the biotechnology industry**

**Availability of dedicated wet-laboratory and specialized facilities at affordable rates**

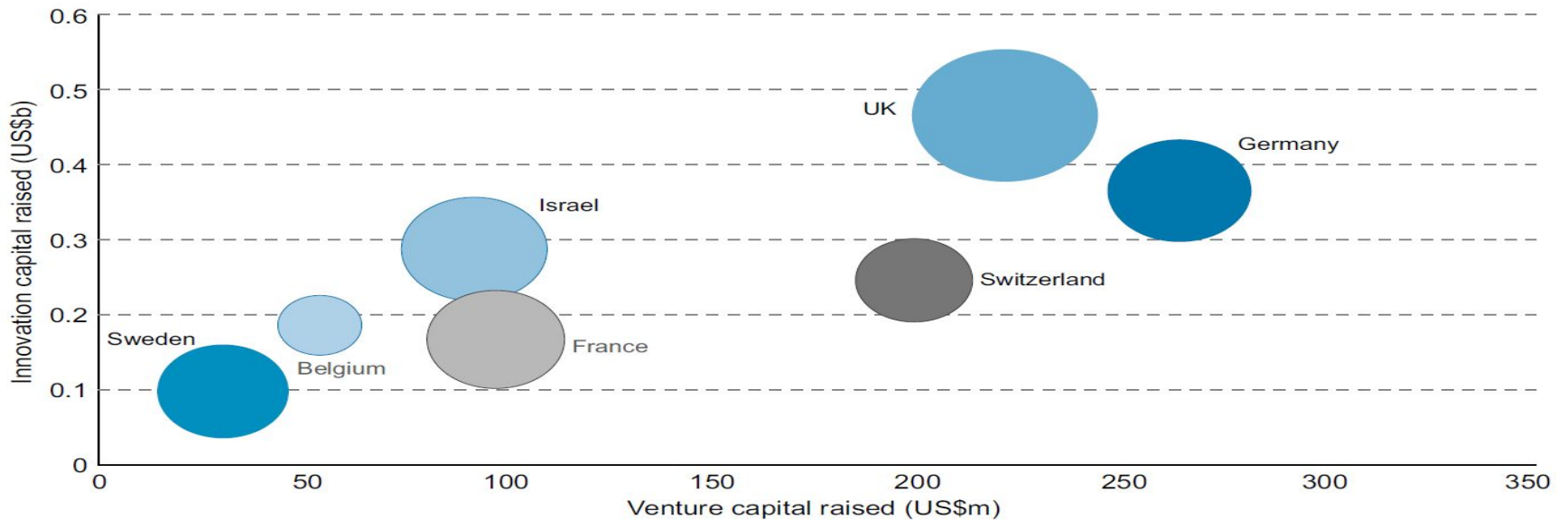
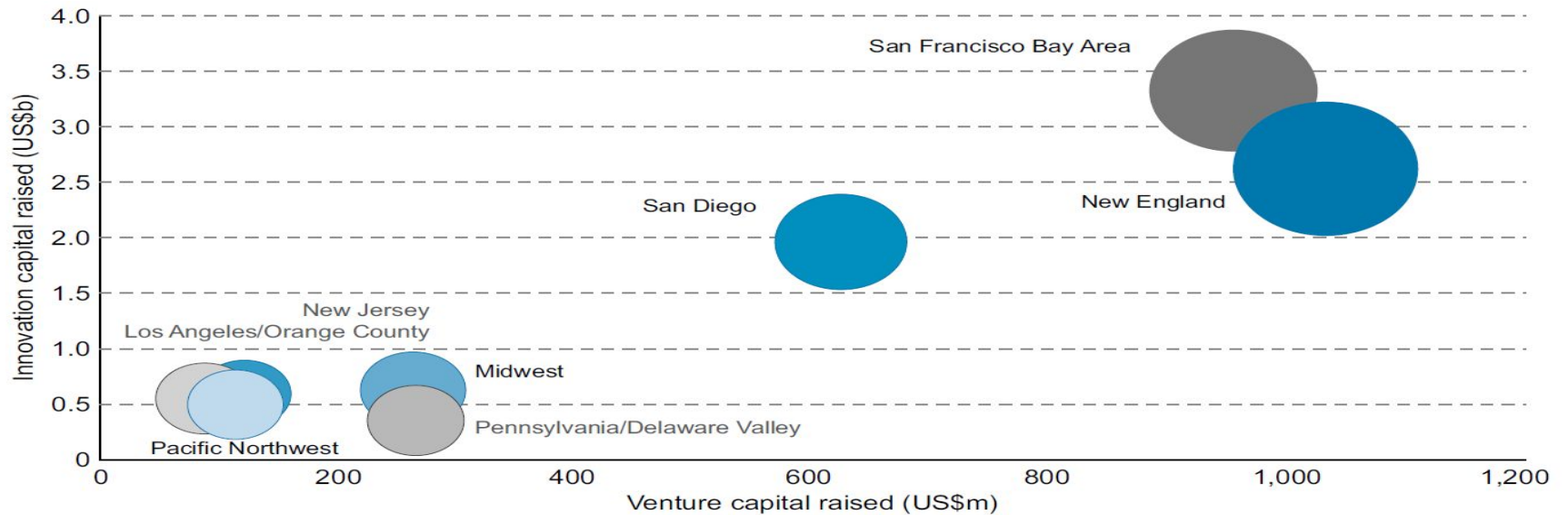
# WORLD'S 2012 R&D SPENDING





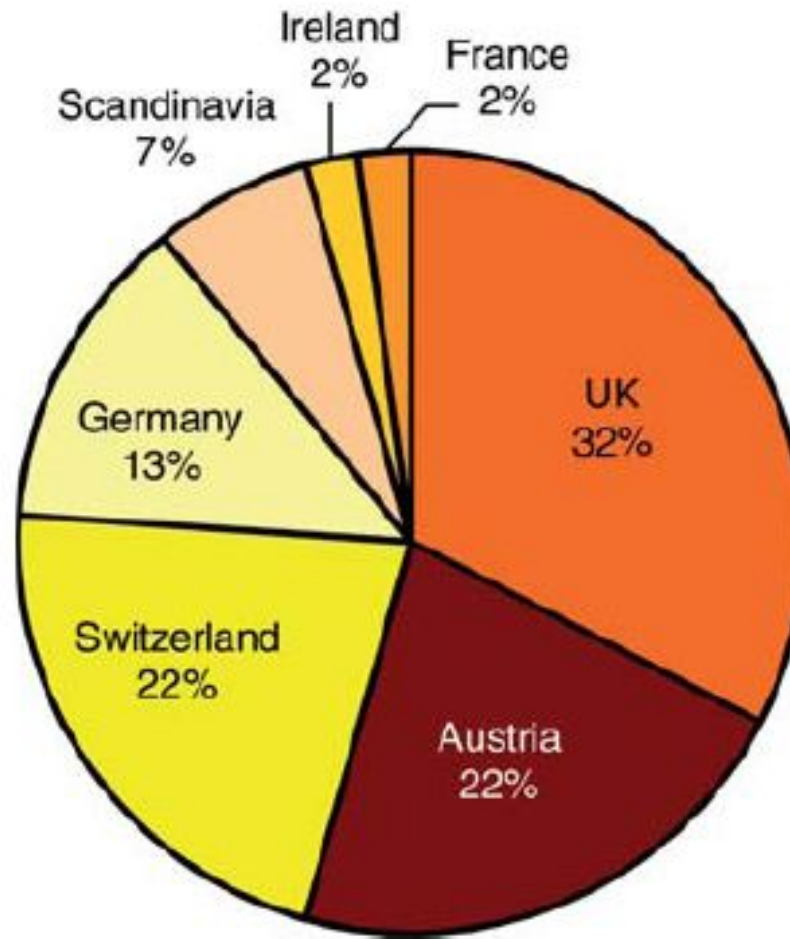
# CAPITAL RAISED IN 2012

## USA vs Europe



# BEST STARTUP FUNDING COUNTRIES IN EUROPE

## Gruber 2009



# **STARTUP FUNDING SOURCES**

**Personal capital**

**(Fools), Friends and Family (FFF)**

**Government grants and financing programs**

**Angel investors**

**Foundation with the focus in your sectors**

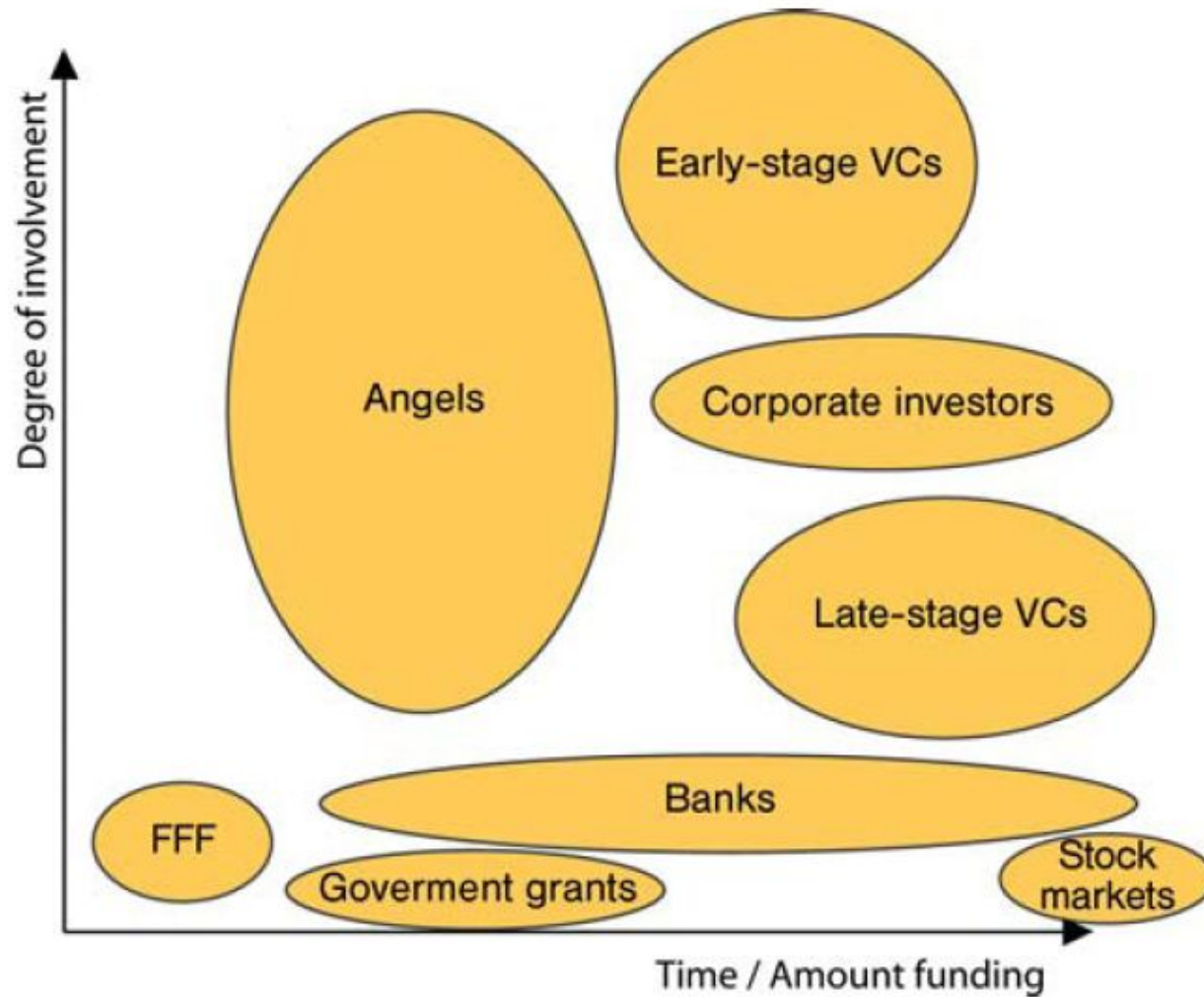
**Venture capital industry**

**Institution corporate partnership**

**Institutional debt financing**



# STARTUP FUNDING SOURCES



# PERSONAL CAPITAL

**~5-20% of the company assets**

**relatively small, varies:  
500 USD (Rob Swanson + Herb Boyer in Genentech)  
tens of thousands USD**



**FFF**

**relatively small, varies,  
up to tens of thousands USD, sometimes up to hundreds of  
thousands USD**





# GOVERNMENT GRANTS AND FINANCING PROGRAMS

**relatively large (up to several millions USD), non-dilutive  
hard to get**



<https://ec.europa.eu/research/participants/portal/desktop/en/opportunities/index.html>



ЗА	355
ПРОТИ	0
УТРИМАЛИСЬ	0
НЕ ГОЛОСУВАЛИ	26
ВСЬОГО	381

РІШЕННЯ ПРИЙНЯТО

16 ВЕРЕСНЯ 13:17:44

# GOVERNMENT GRANTS AND FINANCING PROGRAMS



[https://www.helmholtz.de/transfer/technologietransfer/transferinstrumente/helmholtz\\_enterprise/](https://www.helmholtz.de/transfer/technologietransfer/transferinstrumente/helmholtz_enterprise/)



<https://www.sbir.gov/>

# ANGEL INVESTORS

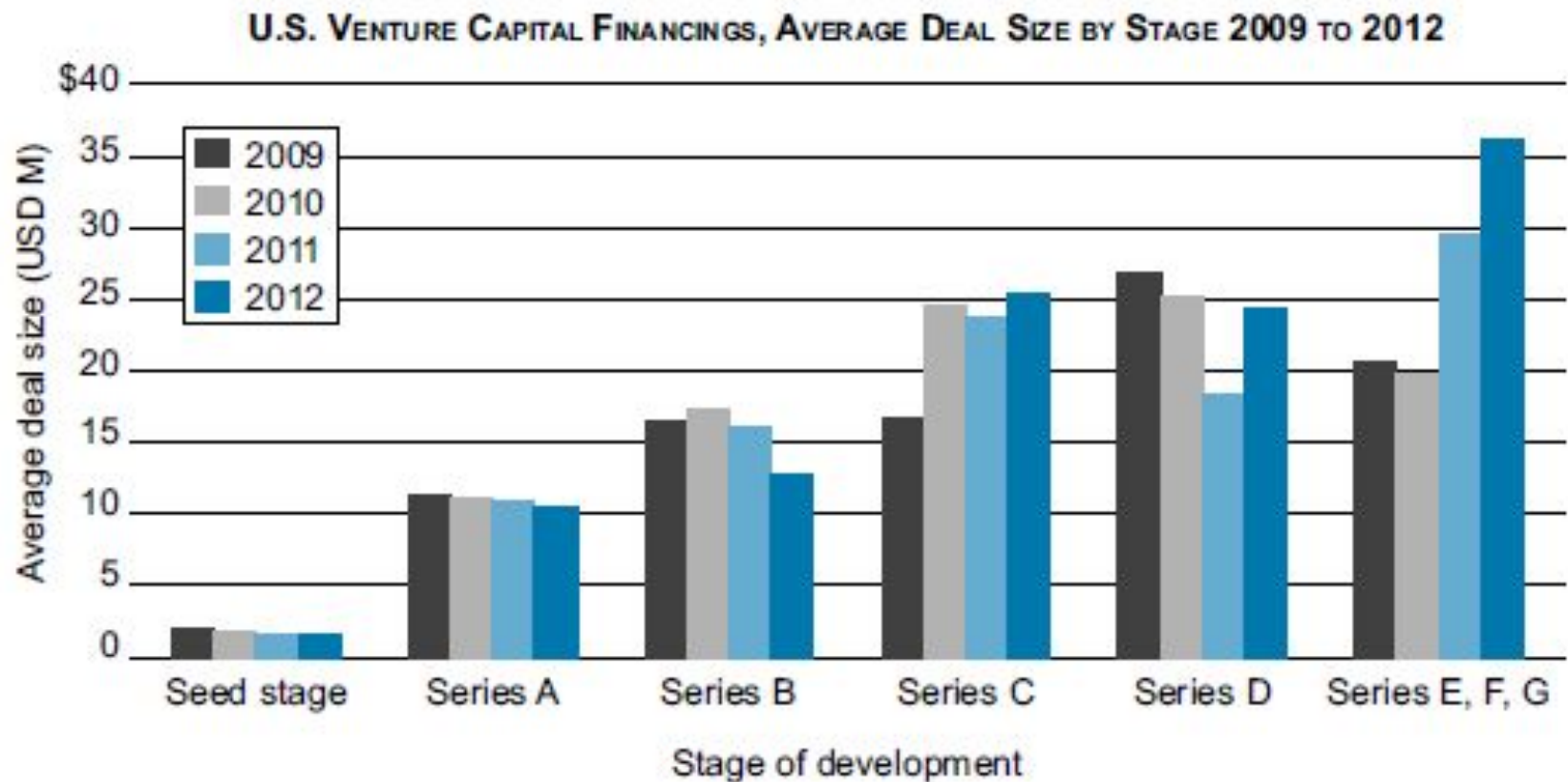
**USD 20-250 K, relatively easy to get**



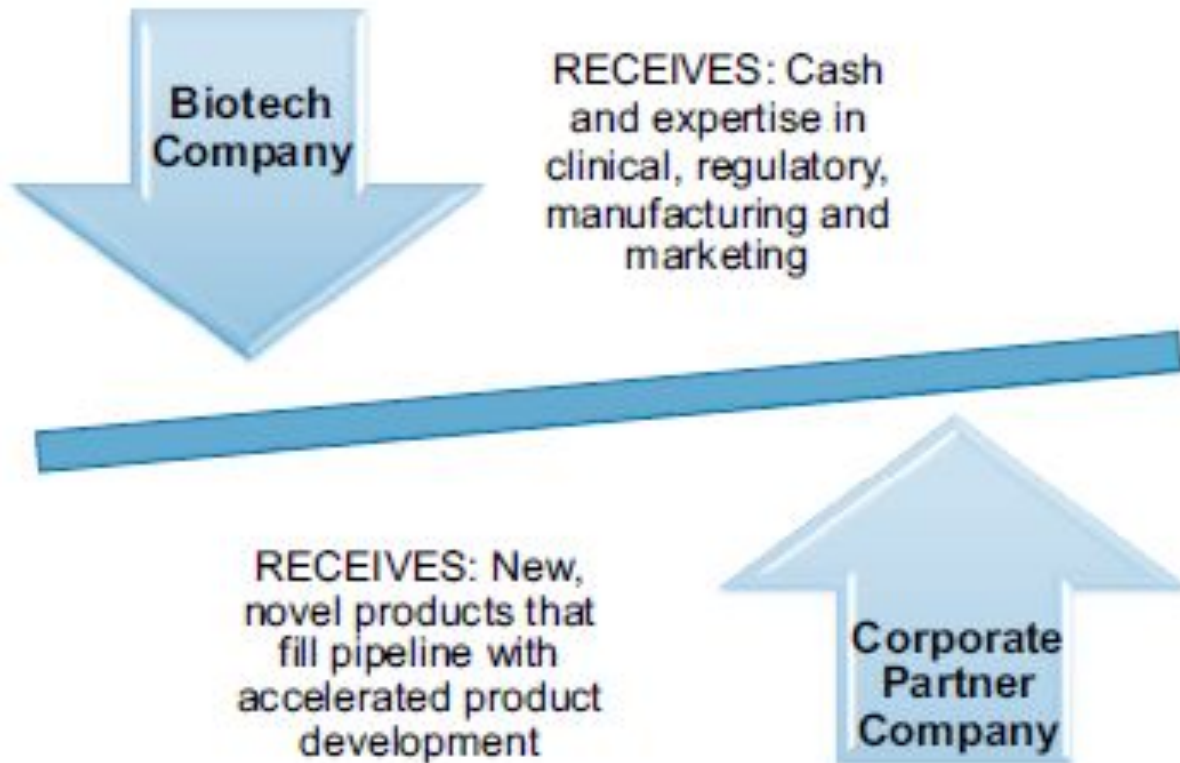


# VENTURE CAPITAL INVESTMENTS

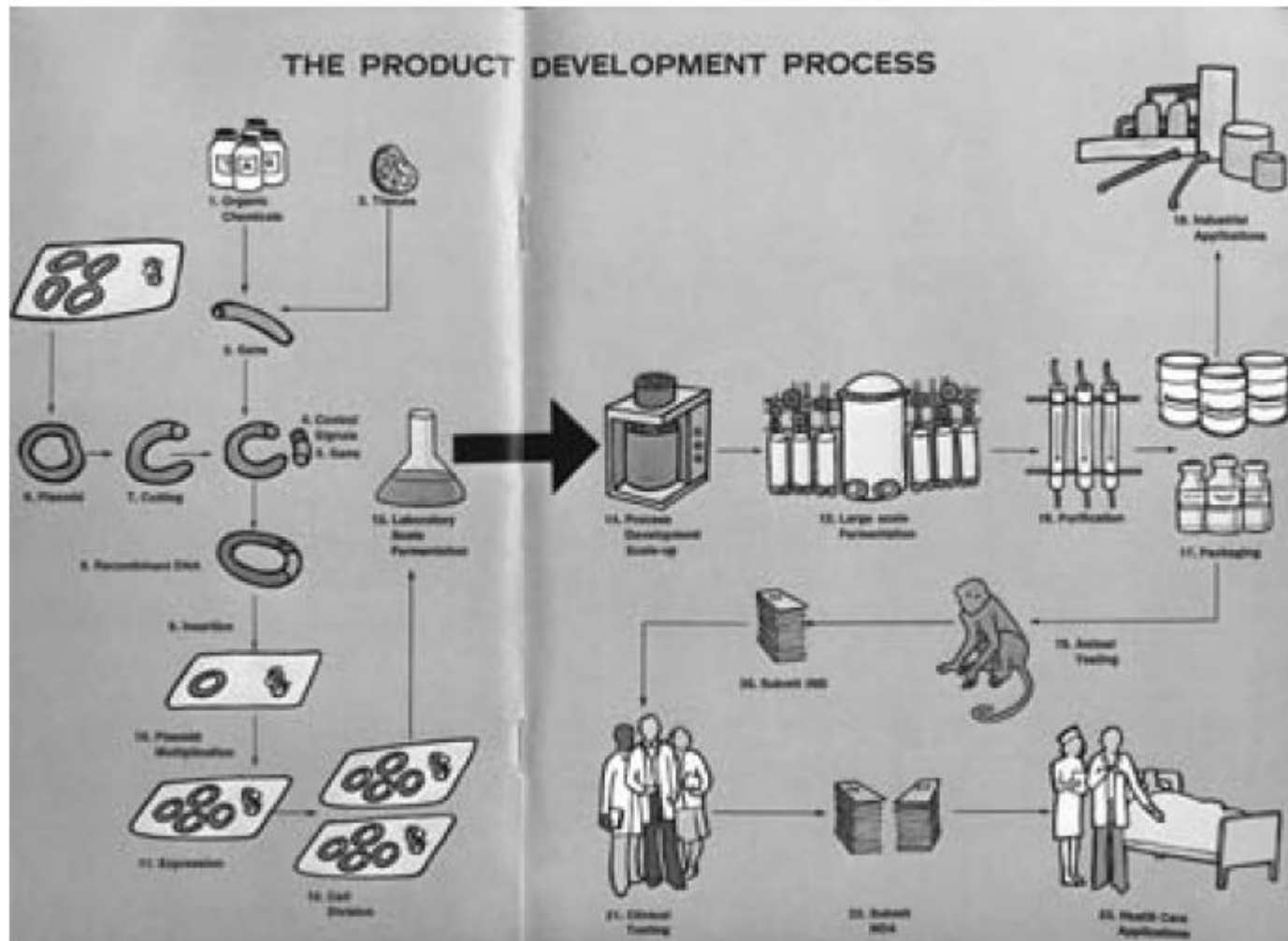
**Large, highly professional management, high-diluting**



# CORPORATE PARTNERSHIP



# IPO, ACQUISITIONS, SELLS



**Fig. 17.** Diagram of “The Product Development Process.” (Initial public offering prospectus, Genentech, Inc., October 14, 1980.)

# SUMMARY

Stages	Product Characterization	Valuation Ranges	Amounts Raised	Funding Sources
Start-up (pre-seed)	Concept	\$1 to \$3 million	\$1000 to \$25,000	Entrepreneur/friends and family/supported by SBIR/STTR/local grants/loans
Seed	Proof-of-concept	\$2 to \$5 million	\$0.25 to \$1 million	Entrepreneur/friends and family/angels/some VC/ supported by SBIR/STTR/ local grants/institutions and foundations
Early and development stage Series A/B preferred	Development	\$3 to \$25 million	\$3 to \$10 million	Angels/VCs/private equity/ institutions/supported by SBIR/STTR/local grants/institutions and foundations
Later stage Series C/D preferred	Development/clinical testing	\$10 to \$100 million	\$5 to 25 million	Vcs/private equity institutions supported by SBIR/STTR/local grants/institutions
Mezzanine	Market launch	\$25 to \$100 million	\$10 to \$50 million	Vcs/investment banks/private equity/institutions