

**COOPERATION BETWEEN FLANDERS  
AND JAPANESE REGIONS  
IN LIFE SCIENCES**

Dr. Ben Kloeck  
November 2018

Delegation of the European Union to  
Japan

**FLANDERS INVESTMENT & TRADE**



***Belgium-  
Flanders  
Leading Life  
Sciences Cluster  
in the Heart of  
Europe***



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# What makes a succesful (life sciences) cluster ?

(in my opinion)

- High-level academic education institute(s)
- World-class research institute(s)
- Succesful biotech ventures with 'easy' access to venture capital
- Critical mass of pharma presence
- Government support – bottom-up
- High-performing cluster organisation to enhance interaction and collaboration between all parners



# Academic excellence



**K.U.Leuven (founded 1425)**

**App 34.000 students; some 13.000 in medicine and life sciences**

**Strong track record in medicine**



*In 2018, for the third year in a row, KU Leuven tops the Reuters ranking of Europe's most innovative universities.*



**UGent (1817)**

**App. 30.000 students, some 10.000 in medicine and life sciences**

**Strong track record in plant biotechnology**



# Life Sciences Research Institute: VIB



Double MISSION :

**World-class centre of excellence  
in Life Sciences research**

**Translate the findings of our basic research into  
products and jobs for the benefit of society**

# Reuters top 10: The most innovative universities in Europe

1. KU Leuven
2. Imperial College London
3. University of Cambridge
4. Federal Polytechnic School of Lausanne
5. University of Erlangen Nuremberg
6. Technical University of Munich
7. University of Manchester
8. University of Munich
9. Technical University of Denmark
10. Swiss Federal Institute of Technology Zurich

# VIB's scientific results are impressive



## High quality publications

>1 peer reviewed publication / day

2 breakthrough papers / week

1 paper in Nature, Cell, Science / week



## Patents

20 - 40 patents/ year since 1997

*Currently more than 1470 scientists from over 60 countries*



## PhD graduations

1 PhD graduation/ week



# The Times Higher Education survey

## Patent citations

Rank	Institution	Country
1	VIB	Belgium
1	Scripps Research Institute	US
1	Institute of Cancer Research	UK
4	The Rockefeller University	US
5	Pasteur Institute	France
6	University of Texas MD Anderson Cancer Center	US
7	QIMR Berghofer Medical Research Institute	Australia
8	Fred Hutchinson Cancer Research Center	US
9	Université Montpellier 1*	France
10	Vita-Salute San Raffaele University	Italy
11	Weizmann Institute of Science	Israel
12	Robert Koch Institute	Germany
13	Agency for Science, Technology and Research (A*STAR)	Singapore
14	Danish Cancer Society	Denmark
15	CHA University	South Korea

This indicator is the proportion of papers published by an institution that have been cited by patents, compared with those that have not.

\* Université Montpellier 1 merged with Université Montpellier 2 in January 2015 to become Montpellier University. These data refer only to Université Montpellier 1.



VIB is most innovative academic institution, based on patent citations

#1 ex aequo with Scripps and CRUK

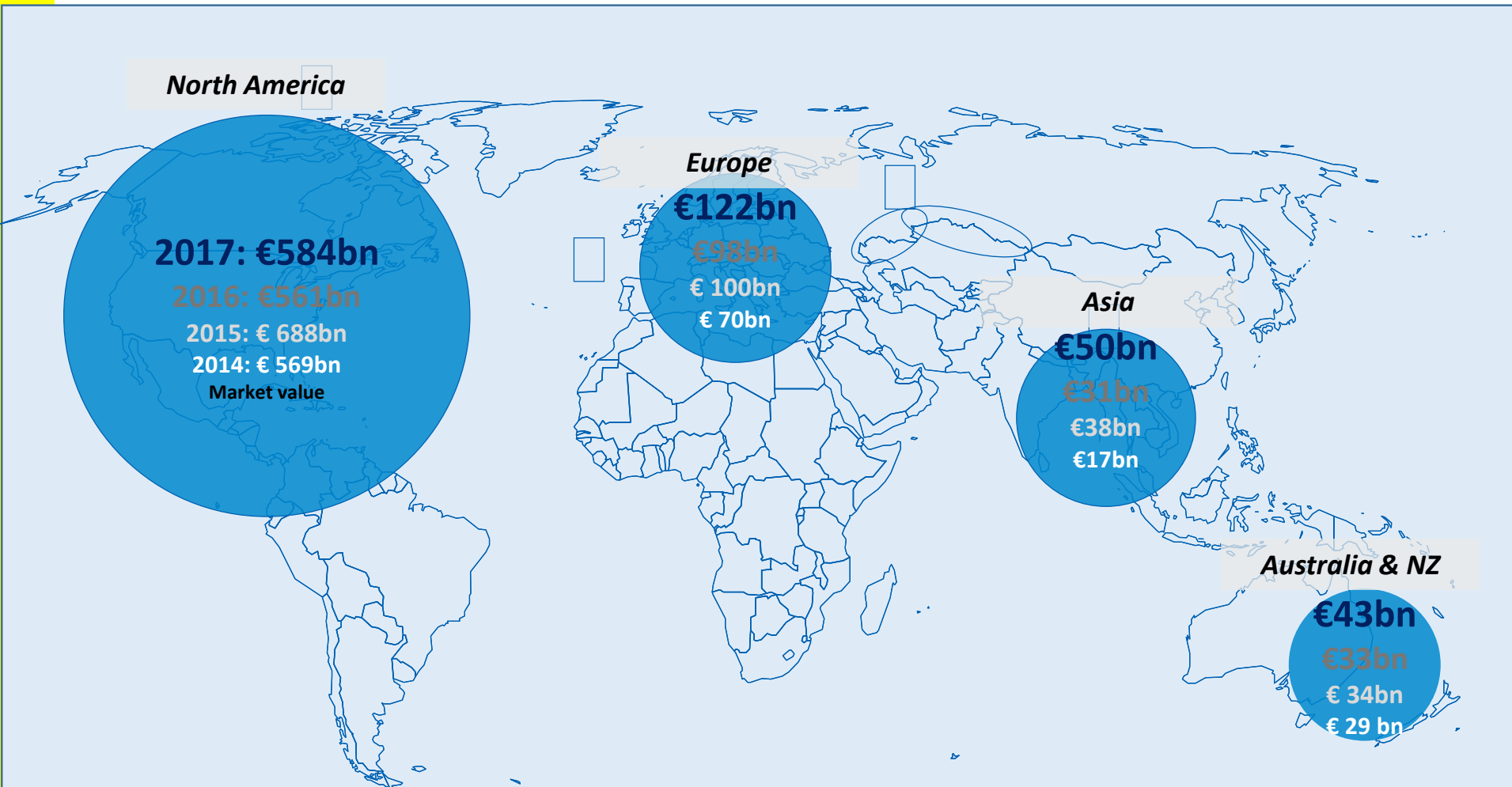
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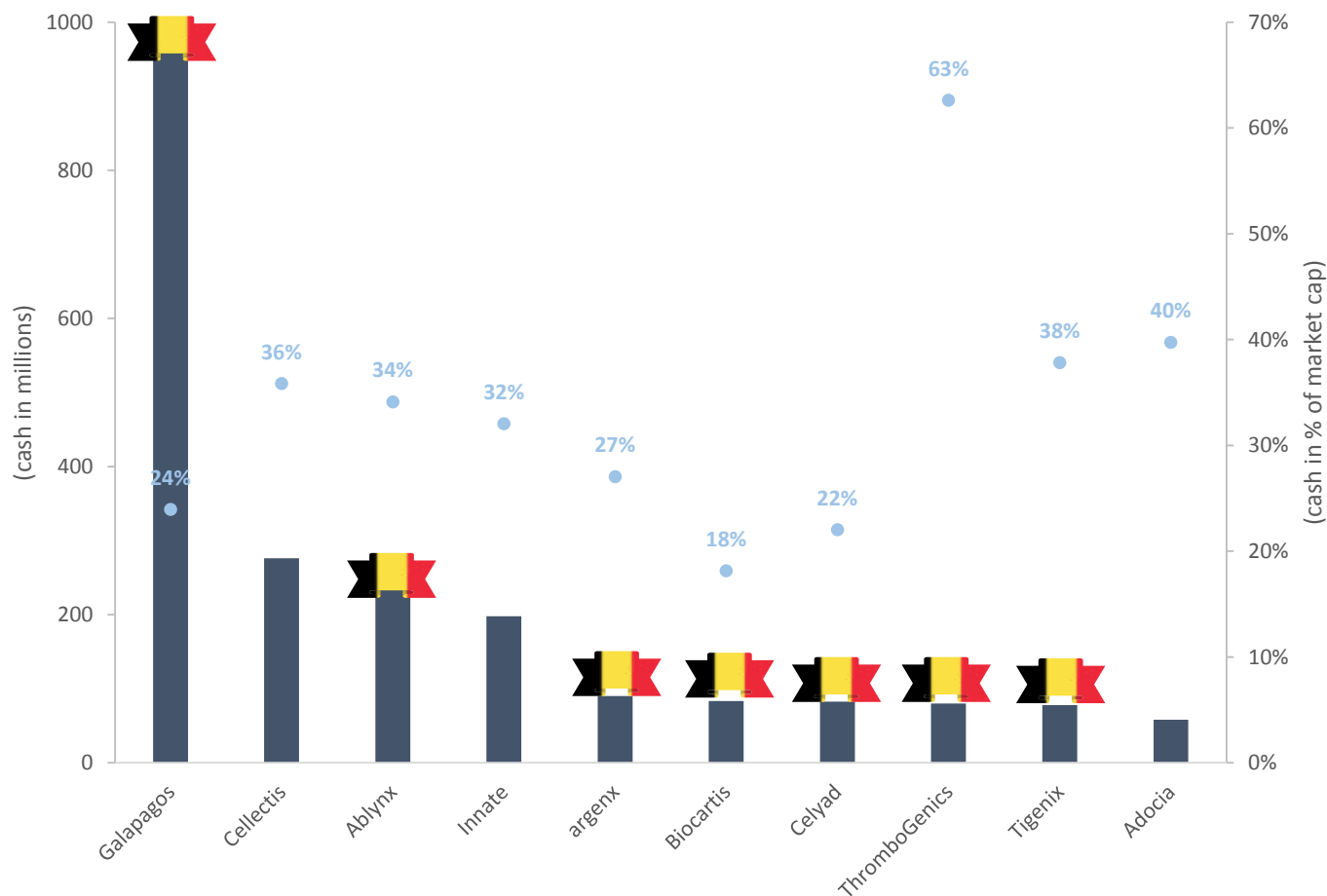
# Biotech companies

Belgian biotech market cap: € 21.4bn, **23 %** of European biotech market cap



Note: numbers are based on the market caps of companies that are classified by Bloomberg as “biotech”  
Source: Bloomberg (numbers are at year end for 2014, 2015, 2016 and as of 8 May for 2017)

# Strongest cash positions held by Euronext listed biotech (<€5bn MCap at 31/12/16)



✓ 7 Belgian life sciences in top 10 of strongest cash positions held by Euronext listed biotech

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# Presence of leaders

- **Genzyme**
  - Genzyme Belgium, Brussels & Genzyme Flanders, Geel
  - New expansion announced
- **Janssen Pharmaceutica (J&J)**
  - Giant R&D site for pharmaceuticals
  - Production plants
  - Over 80 blockbuster new discoveries
- **GSK**
  - Global HQ of Biologics – 9000 people
  - Largest production site for vaccins in the world
- **AstraZenica**
  - Regulatory affairs, Distribution center
  - Staff 200
- **Merck**
  - Over 1,700 people
  - 95% of all Phase I studies in Belgium
- **Pfizer**
  - First office on European continent
  - Now 2200 employees
  - Academic collaborations



genzyme



janssen  
PHARMACEUTICAL COMPANIES  
OF Johnson & Johnson



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# Cluster organisation

**flanders.bio**  
Networking

The Flagship of flanders.bio:  
“knowledge for growth”

Europe's 2nd largest life sciences conference

15th edition: **May 09, 2019**



2018

1.259

REGISTERED DELEGATES



35%

C-LEVEL & SENIOR MANAGEMENT

580

REGISTERED COMPANIES

=

6%

INCREASE COMPARED TO LAST EDITION



506

PARTNERING MEETINGS



= 89,5%

INCREASE SINCE PARTNERING STARTED IN 2015



23 COUNTRIES

115 BOOTHS

14

RECRUITING COMPANIES

65

SPEAKERS

4

SATELLITE WORKSHOPS

62

RESEARCH POSTERS

## Well-connected clusters

- Japan BioIndustry Association – JBA
  - *signed MoU; attend KfG regularly*
- Foundation for Biomedical Research and Innovation (Kobe)
  - *signed MoU; attend KfG regularly*
- Kansai Pharmaceutical Industries Association – KPIA
  - *organised b2b sessions*



# Growing interest from Japanese life-sciences companies in Belgium

- M&A
  - Fujirebio ← Innogenetics
  - Takeda ← Tigenix
  - Astellas ← Ogeda
- European HQ
  - Nipro → Mechelen
- Capital investment
  - Shinsei CIP → Promethera
- License agreement: Ono - Celyad
- R&D collaboration
  - IMEC + Panasonic
- Cluster collaboration: flanders.bio + JBA
- Various business collaborations



**Thank you**

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**Flanders**  
State of the Art

**[ben.kloeck@fitagency.com](mailto:ben.kloeck@fitagency.com)**