



# Start-up Climate in the Netherlands

André van de Sande

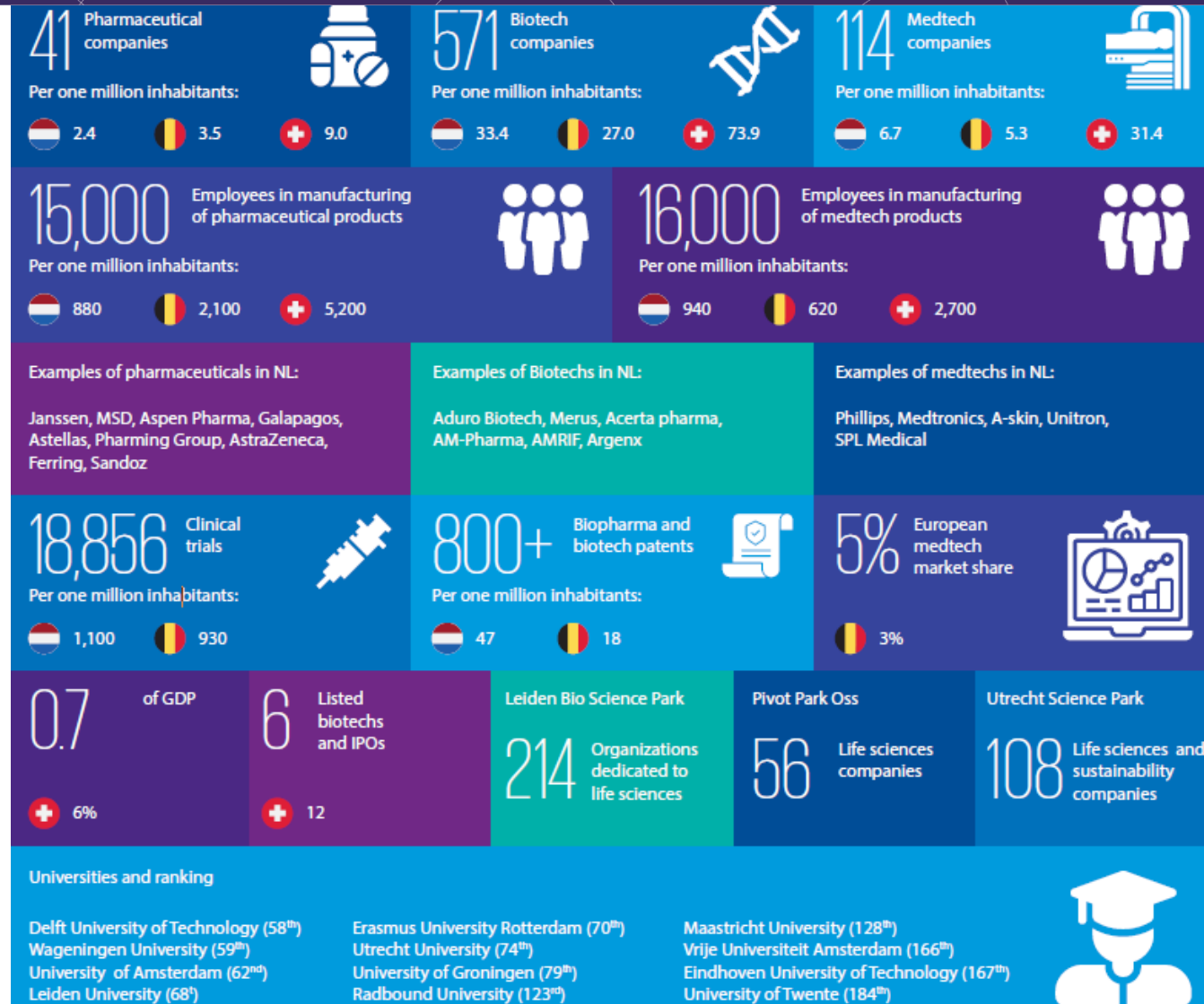


pivotpark

# Dutch life sciences sector in numbers

- 0.7% of GDP, € 6 billion
- 9th largest sector
- Annual growth of 4%
- Approximately 30.000 people employed
- 726 life science companies
  - 571 Biotech
  - 114 Medtech
  - 41 Pharmaceutical
- Roughly 35% of Biotechs are a start-up (estimate HollandBio)

# How do we compare?



Source: KPMG Unlocking the life science potential

# Dutch life sciences sector

## Enabling preconditions



Sector growth



Stakeholder presence



Hub presence



Physical infrastructure



Work-life balance



Workforce productivity



Educated and skilled workforce



Digital infrastructure

## Hurdles



Complex, fragmented, and smaller scale funding landscape



Dispersed Dutch life sciences story



Limited presence of large pharmaceutical or biotech companies



Limited entrepreneurship among academic life sciences experts

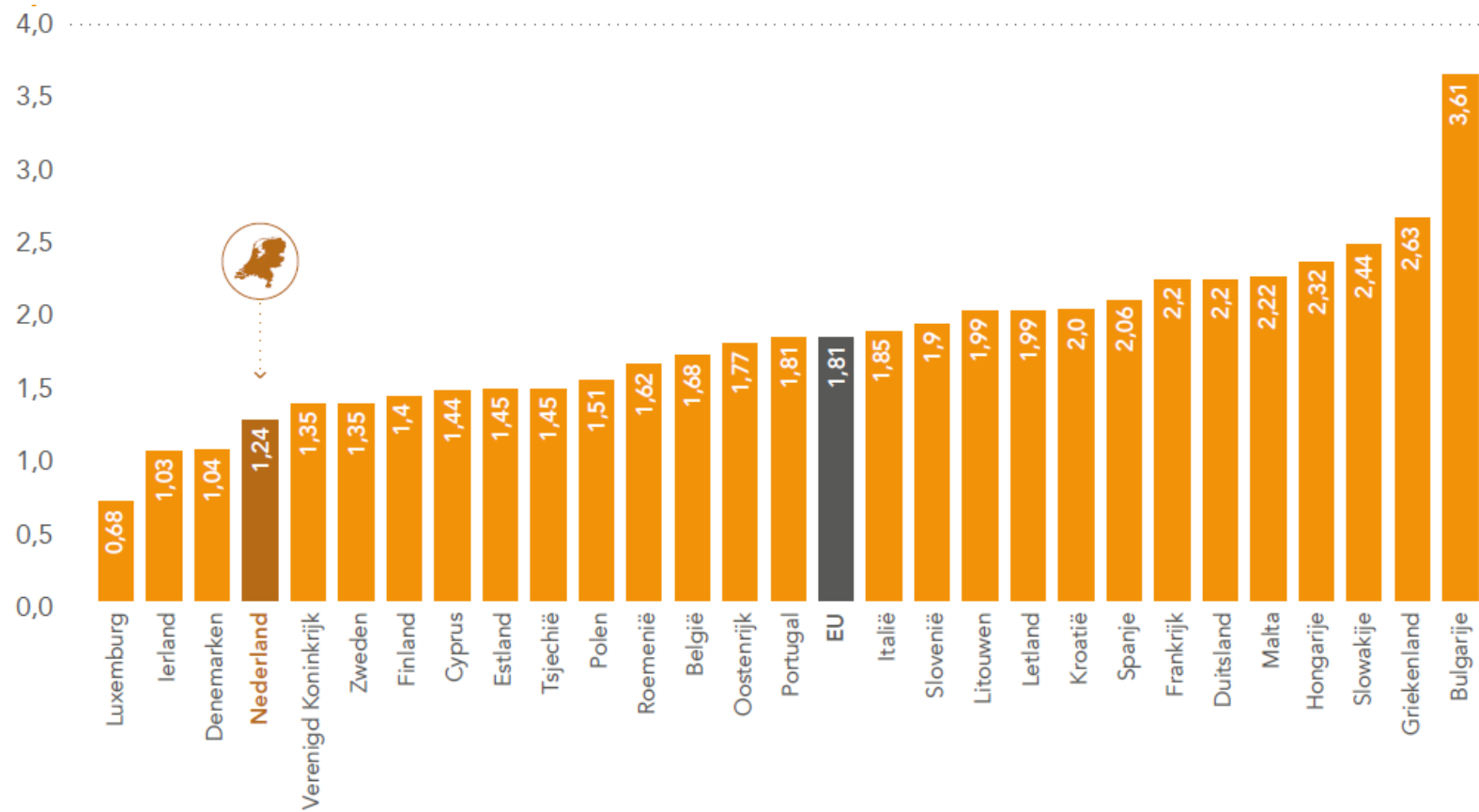


Data sharing and usage limitations



Suboptimal debate between government and industry

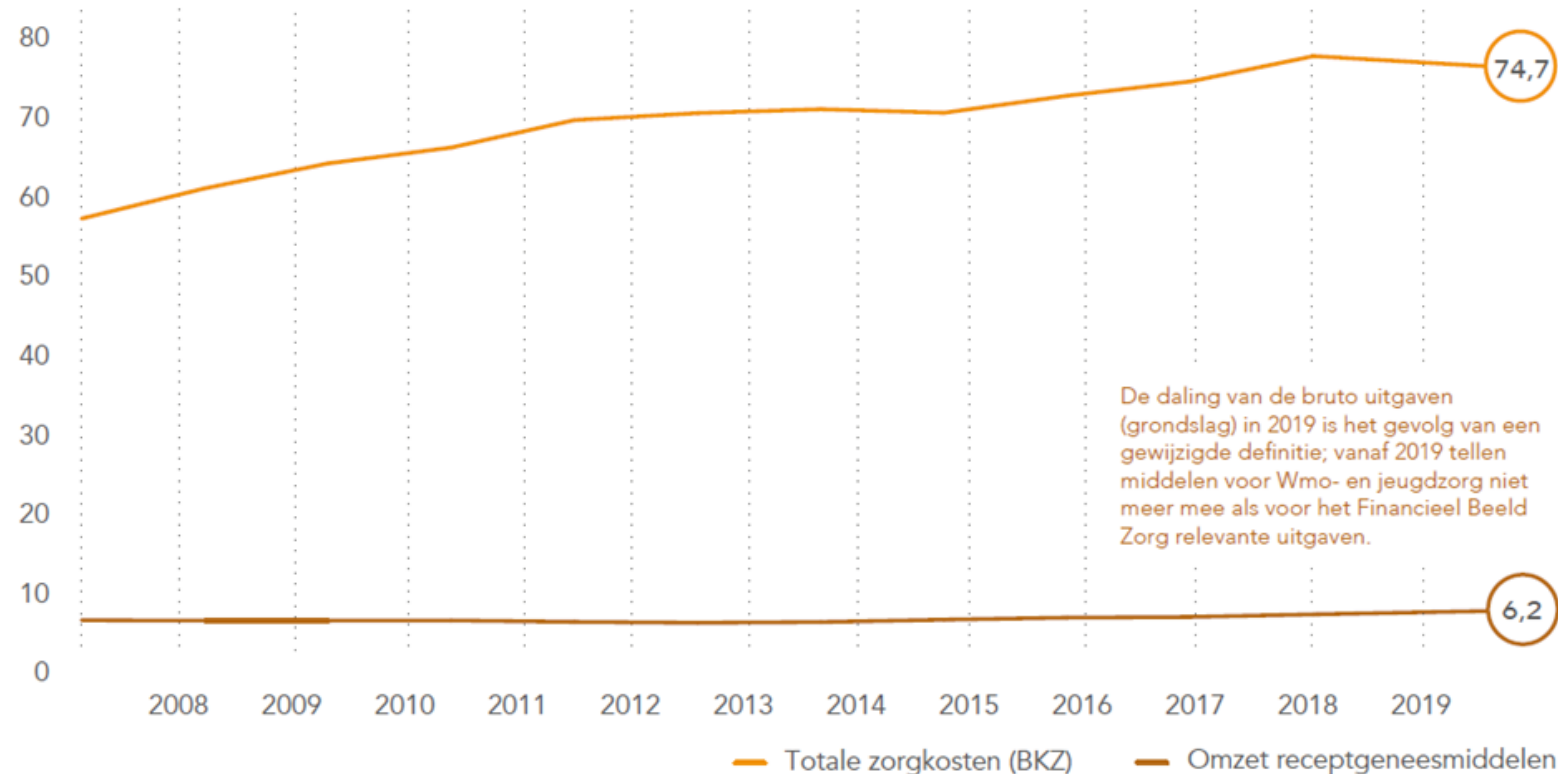
# Dutch expenditures prescription medicines As % of GDP



Bron: CBS, Nederland langs de Europese meetlat, 2019

# Dutch expenditures prescription medicines

## Totaal cost



Bron: Begroting VWS 2021 & Farminform

# From start-up to scale-up: AWTI recommendations

1. Clarify expectations for knowledge institutions (valorization)
2. Expand over provincial borders
3. Strengthen mix of competencies at start-ups
4. Support to maintain the ambition of knowledge intensive start-ups
5. Construct agreements with knowledge institutions to support further growth of start-ups
6. Improve financing possibilities for start-ups

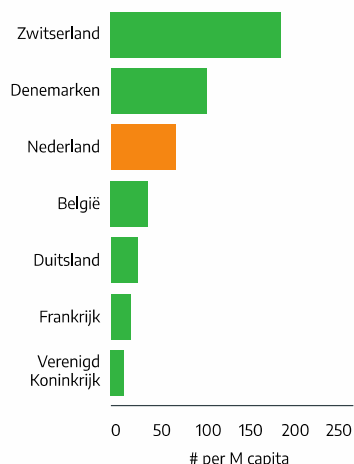
# LOST IN TRANSLATION?

PATIËNT EN CONSUMENT PROFITEREN TE WEINIG VAN NEDERLANDSE TOPKENNIS

De uitstekende Nederlandse kennispositie op het gebied van life sciences vertaalt zich onvoldoende in bedrijvigheid en productontwikkeling. Daar valt veel winst te behalen.

Nederland **scoort internationaal goed** op het aantal octrooiaanvragen vanuit academie en industrie. Het bewerkstelligen van een solide octrooipositie is een eerste essentiële valorisatiestap op weg naar nieuwe biotech producten.

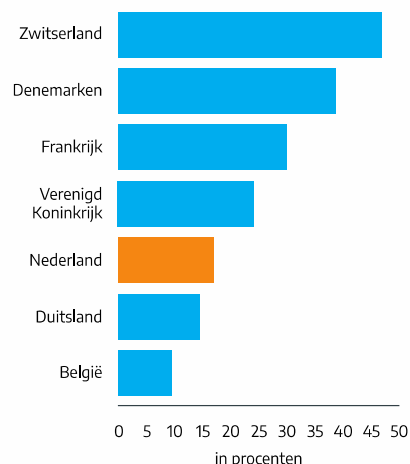
## Life Sciences Octrooiaanvragen 2019<sup>1</sup>



<sup>1</sup> Life sciences octrooien zijn gedefinieerd als het totaal van de octrooiaanvragen binnen de sectoren Medical technology, Biotechnology en Pharmaceuticals zoals gedefinieerd volgens de EPO.  
Bron: European Patent Office, European Patent Applications 2019.

Nederland **scoort internationaal minder goed** op de groei van het aantal life sciences R&D bedrijven dat voortvloeit uit een octrooi. Een zorgelijk signaal, omdat juist bedrijven kennis doorontwikkelen tot producten en praktische toepassingen.

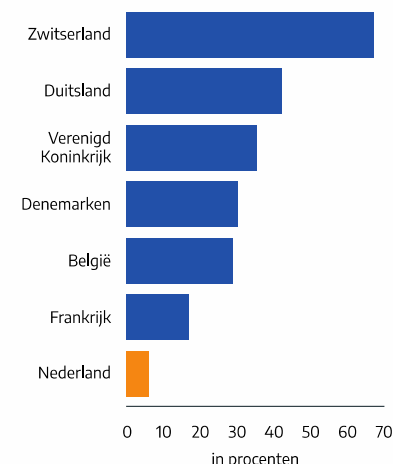
## Groei life sciences R&D bedrijven 2015-2019<sup>2</sup>



<sup>2</sup> Life sciences R&D bedrijven zijn gedefinieerd als het totaal van de Biotechgate sectoren: Biotechnology Therapeutics & Diagnostics, R&D services, Pharma en Medtech. Bron: Biotechgate.

Nederland **loopt sterk achter** op het gebied van productontwikkeling. De afgelopen vijf jaar is het aantal producten in ontwikkeling met slechts 6% gegroeid, in schril contrast met zes andere Europese life sciences hubs.

## Groei life sciences R&D producten in ontwikkeling 2015-2019<sup>3</sup>



<sup>3</sup> Life sciences R&D producten zijn gedefinieerd als het totaal van de producten in de Biotechgate sectoren: Therapeutics, Diagnostics en Medical devices. Bron: Biotechgate.

**Vijf aanbevelingen om de Nederlandse kennispositie te verzilveren voor patiënt en consument:**

- 1 Blijvend investeren voor behoud van onze goede kennisbasis
- 2 Academisch ondernemerschap als erkend carrièrepad
- 3 Financiering die aansluit bij de behoefte van bedrijven
- 4 Consequent en stimulerend overheidsbeleid dat inzet op biotechnologie
- 5 Ontwikkeling én toepassing van innovatie inbedden in het Nederlandse ecosysteem

# Pivot Park

## Part of a worldclass ecosystem



### *Vision*

Pivot Park wants to be one of Europe's most attractive science parks in biopharmaceutical innovation and create a successful growing campus with a strong community

- >60 companies
- 4750 jobs
- R&D focused on innovative medicines
- Production
- Every invested € in LSH in Oss translates to minimal 4€ in the region

# High-scoring R&D Regions in Europe

Leading European regions in Patent applications at the European Patent office 2018

	Region	Country	2018
1	Bayern	Germany	8.238
2	Île-de-France	France	6.713
3	Nordrhein-Westfalen	Germany	5.125
4	Baden-Württemberg	Germany	5.082
5	North Brabant	The Netherlands	3.582
6	Stockholm	Sweden	2.280
7	Hessen	Germany	2.205
8	Greater London	Great Britain	1.943
9	Niedersachsen	Germany	1.712
10	Rheinland-Pfalz	Germany	1.598
11	Vlaanderen	Belgium	1.482
12	Hovedstaden	Denmark	1.465
13	Lombardia	Italy	1.406
14	Auvergne-Rhône-Alpes	France	1.319
15	Vaud	Switzerland	1.192
16	Helsinki-Uusimaa	Finland	1.188
17	South Holland	The Netherlands	1.066
18	Austria West	Austria	1.023
19	Zürich	Switzerland	1.014
20	Basel-Stadt	Switzerland	980

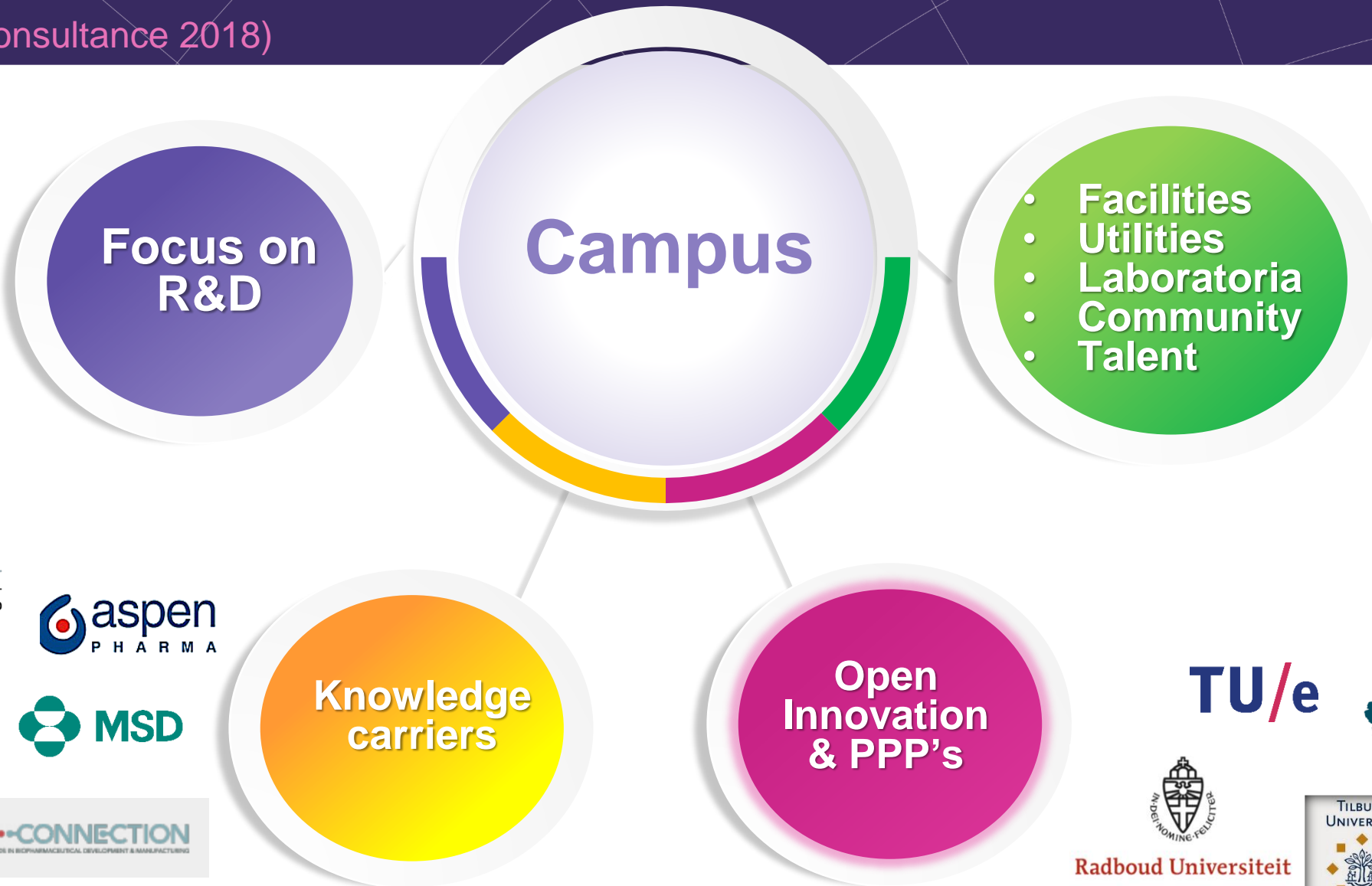
# Brabant has become the hotspot of Life Sciences & Health

“Half of the total Dutch production value and 25% of all jobs ends up in Brabant – especially Biotech is booming”

*Source: [innovationorigins.com](http://innovationorigins.com)*

# Important pillars of the Pivot Park Campus

Bron: Buck Consultance 2018)



Acerta Pharma

A member of the AstraZeneca Group

aspen  
PHARMA

ARDENA

MSD

ORGANON

BIO-CONNECTION  
FULFILLING NEEDS IN BIOPHARMACEUTICAL DEVELOPMENT & MANUFACTURING

TU/e

WAGENINGEN UR



Radboud Universiteit



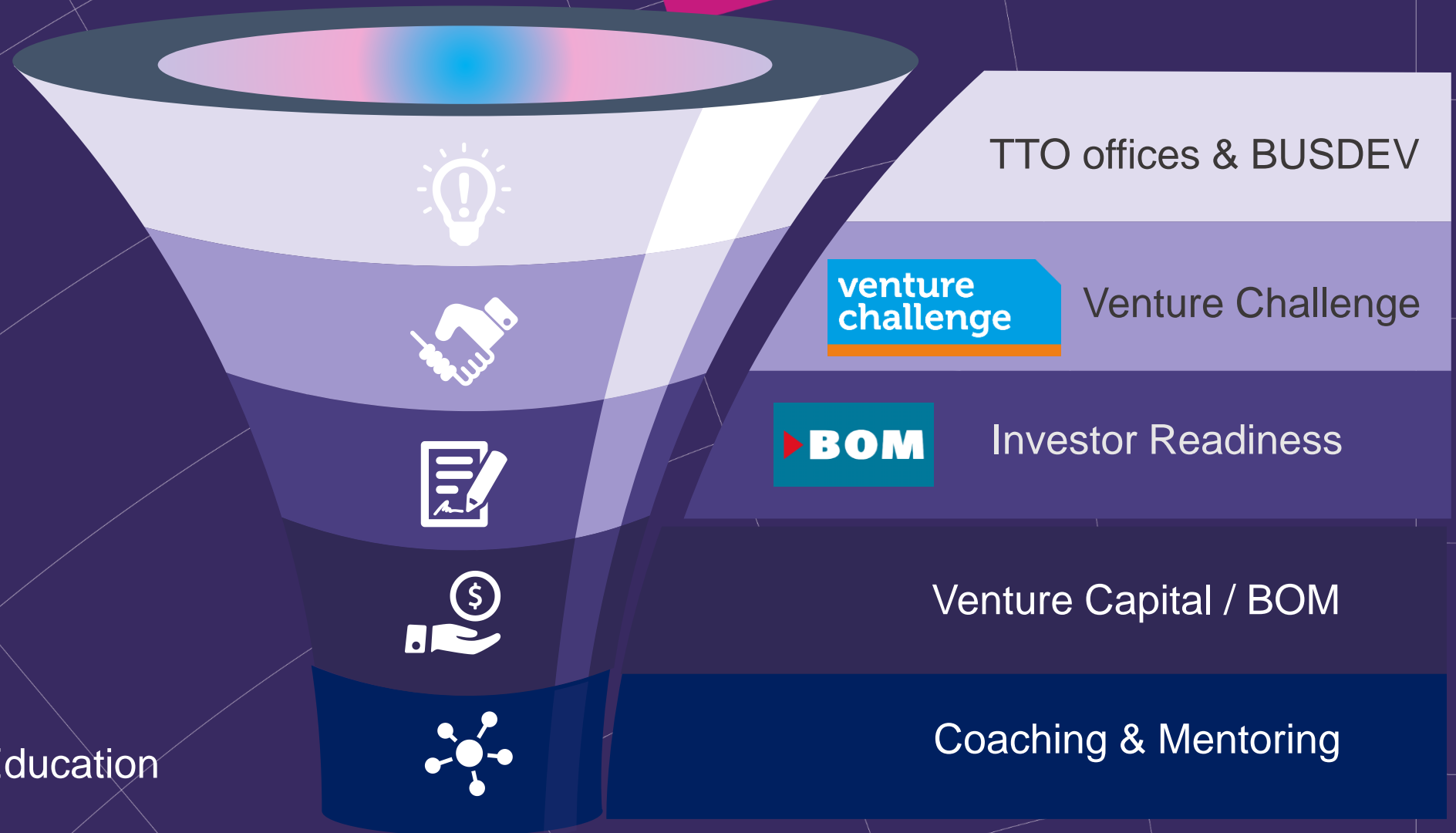
Universiteit Utrecht

# Incubator: valorisation with the best start-ups

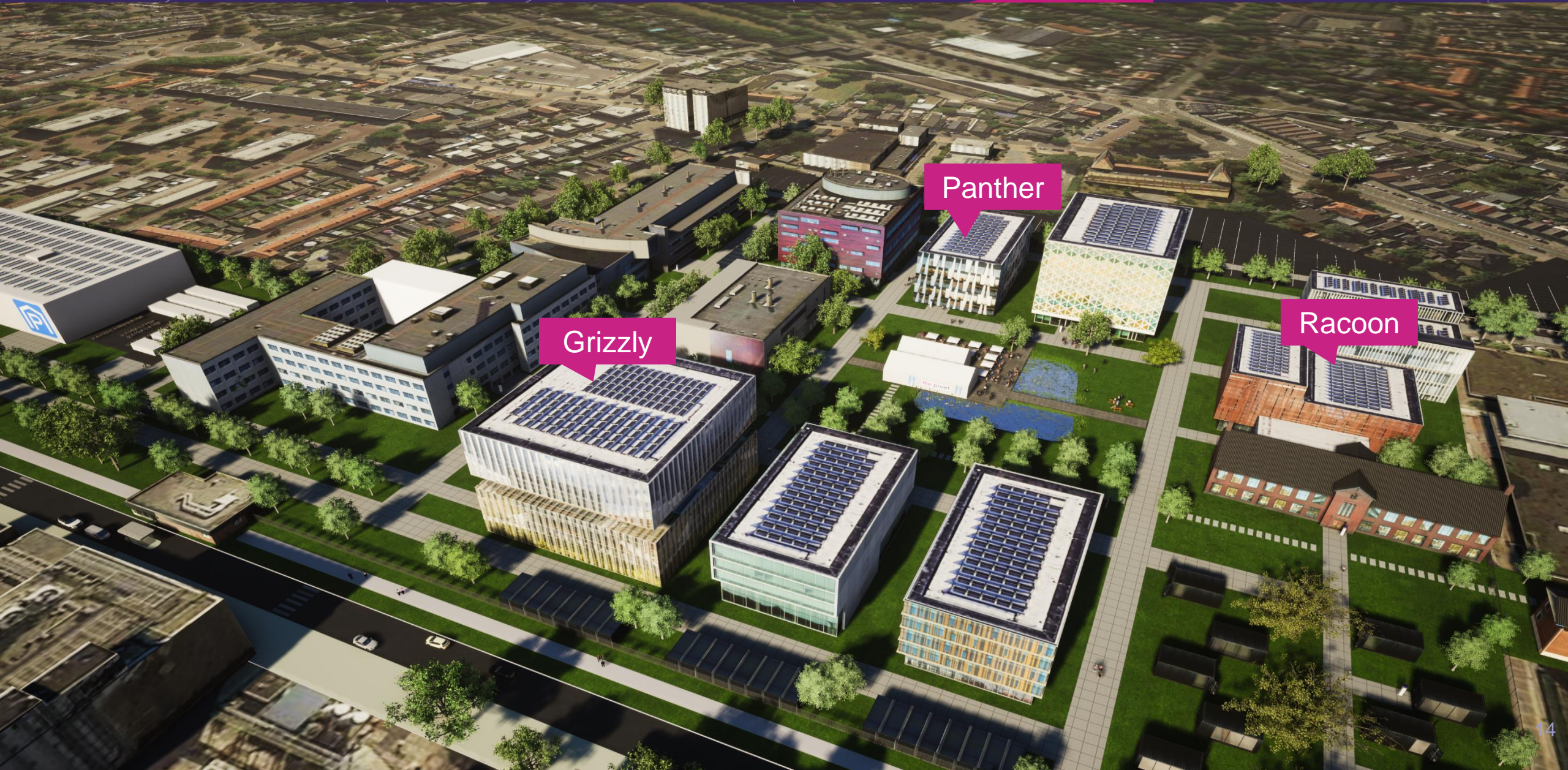


## Attracting Talent

- Lectorate
- Summerschool
- Minor
- Internships
- Post Graduate Education



# Pivot Park invests in the future: 25 000 m2 extra



# Recent Successes



27 Jul 2020  
Acalabrutinib (Calquence) from Acerta recommended for approval in the EU by the CHMP for Chronic lymphocytic leukaemia (CLL)



Sept 2020  
Synaffix has been recognized with the "Best ADC Platform Technology" award at the 7th Annual World ADC Awards ceremony during the [#WorldADC](#) event!



Oct. 12, 2020  
FDA grants Glycostem's oNKord® Orphan Drug Designation for Multiple Myeloma



Nov. 2020  
Pharmacytics and Madam Therapeutics develop a new class of antibiotics with oral availability



Nov. 16, 2020  
Lead Pharma signs a research collaboration and licensing deal with Roche to develop oral small molecules for immune Mediated Disease.  
Worth up to EUR 270 mln



Nov. 18, 2020  
Pharming decides to build a new drug substance building at Pivot Park in Oss

# Next steps

- View the Netherlands as one life science community and build a nationwide eco system
- Reduce the distance between academia and industry; more attention for valorization
- Improve the mix of competencies, stimulate entrepreneurship and continue to invest in education
- A government that understands the importance of life science and commits to full support of the sector
- Increase the attractiveness of the Netherlands for foreign investors
- Make the industry an integral part of healthcare as a whole
- Active collaboration between science parks crossing provincial borders
  - .....with a joint proposition



Pivot Park ready to become  
the new

B(Oss)ton!