

SCIENCE MEETS LIFE

Fostering innovation & impact at VIB



Highly cited researchers 2023

Highly Cited Researchers have demonstrated significant and broad influence in their field(s) of research.

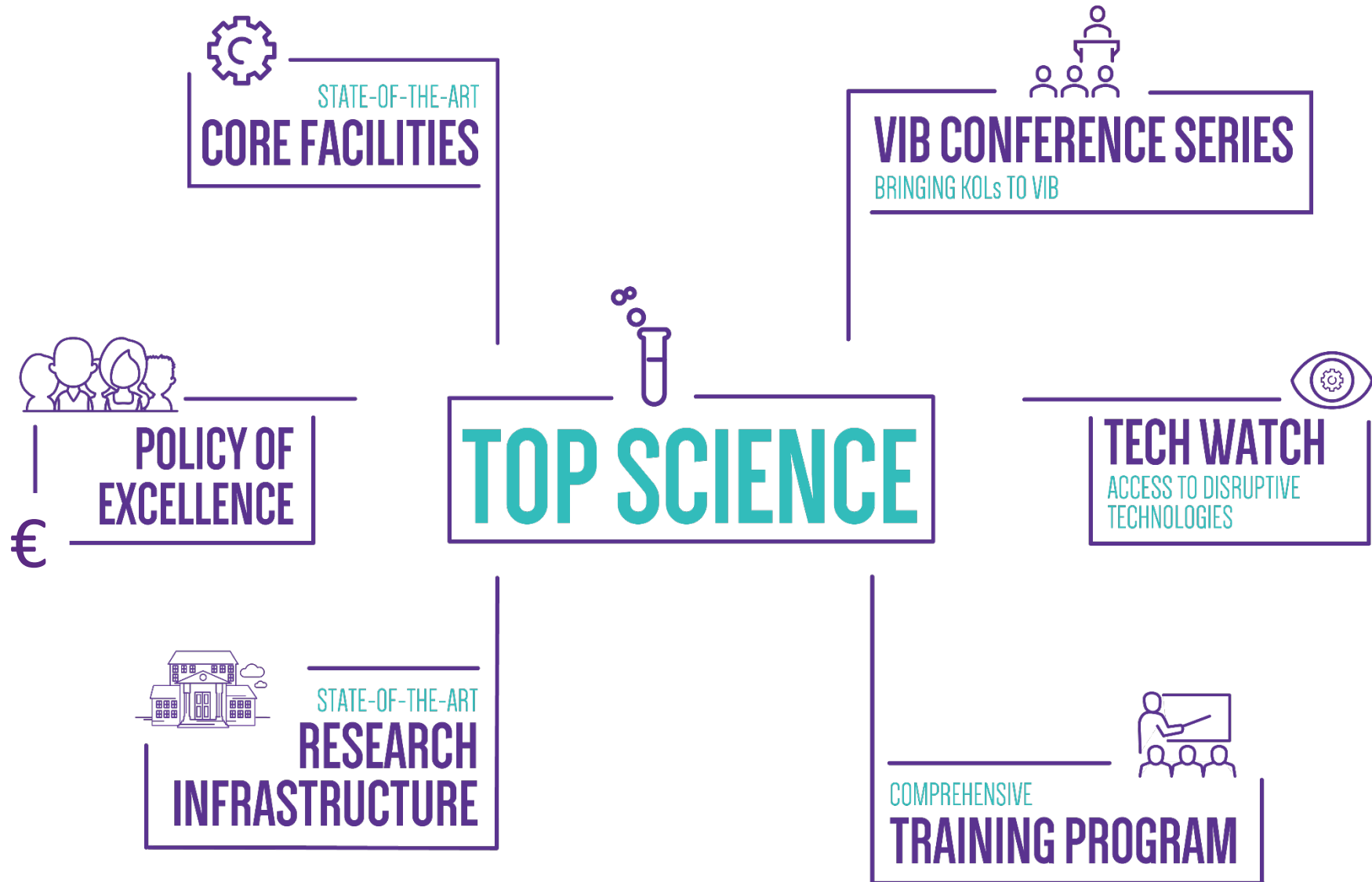
Each researcher selected has authored multiple Highly Cited Papers™ which rank in the top 1% by citations for their field(s) and publication year in the Web of Science™ over the past decade. However, citation activity is not the sole selection indicator. A preliminary list based on citation activity is then refined using qualitative analysis and expert judgement.

Of the world's population of scientists and social scientists, Highly Cited Researchers™ are 1 in 1,000.

 Clarivate™

'One in a Thousand'
scientists



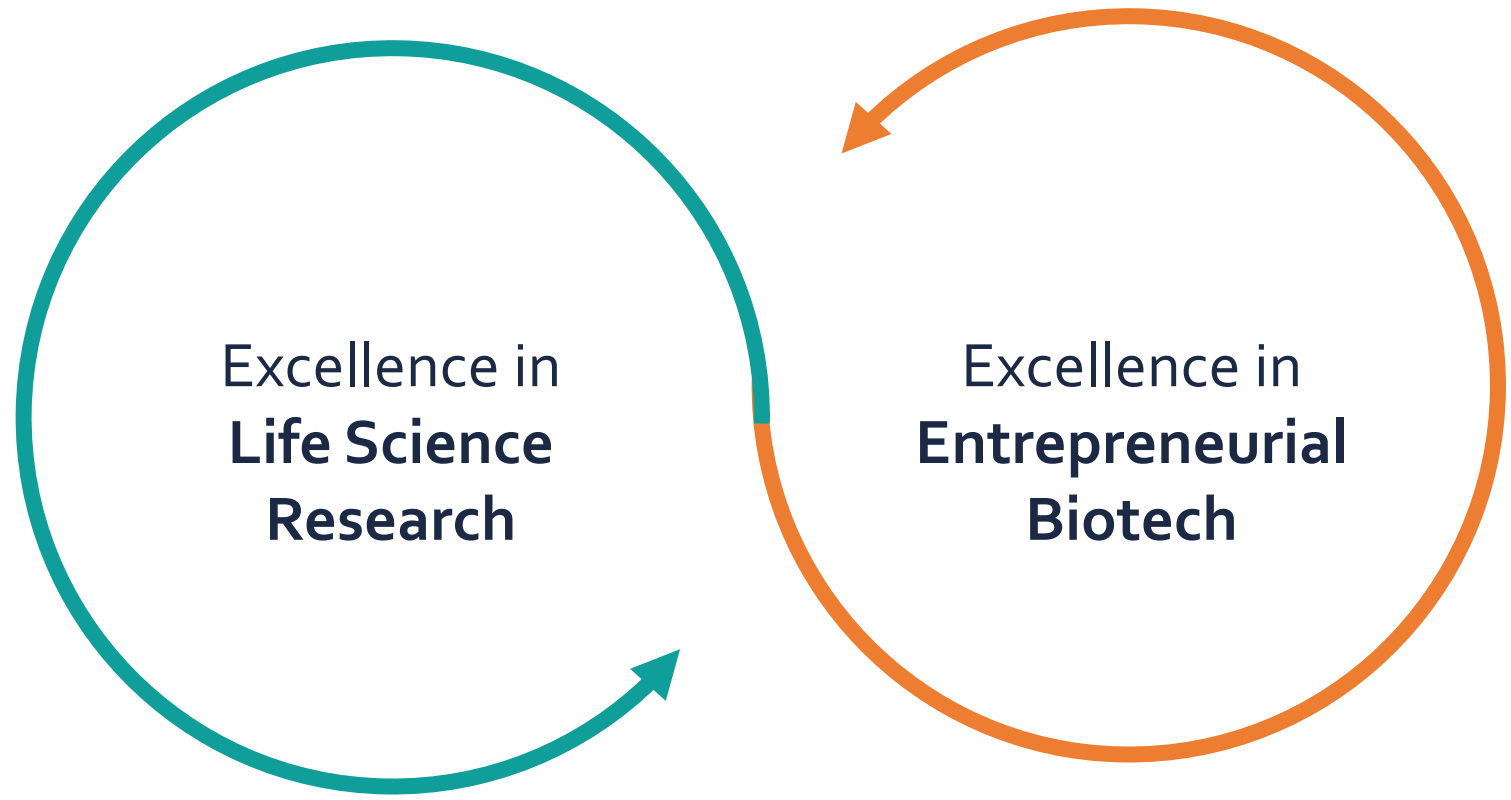




Science leads to ...



short term outcomes





Breakthrough scientists
&
scientific founders



Our impact on food and agriculture



Publicly listed since
2021 Euronext Brussels

Est. 2013

The concept
Reinventing Food Protection
through AGROBODIES



€13,4M total funding

Est. 2020

*PMV, Seventure, AIF, Qbic, V-
Bio & VIB*

The concept
Oral antibodies to improve animal
health



~€100M total funding

Est. 2020

The concept
Superior micro-organisms for
sustainable agriculture



€33,7 M Series A
*V-Bio, AIF, PMV, Estari,
Korys, Thia, Globachem, II,
HFT, GFF & VIB*

Est. 2021

The concept
Sustainable plant protein
production

Undisclosed seed
round with
Astanor Ventures,
Thia ao



Est. 2022

The concept
Molecular Beer – created on
demand



Science leads to ...

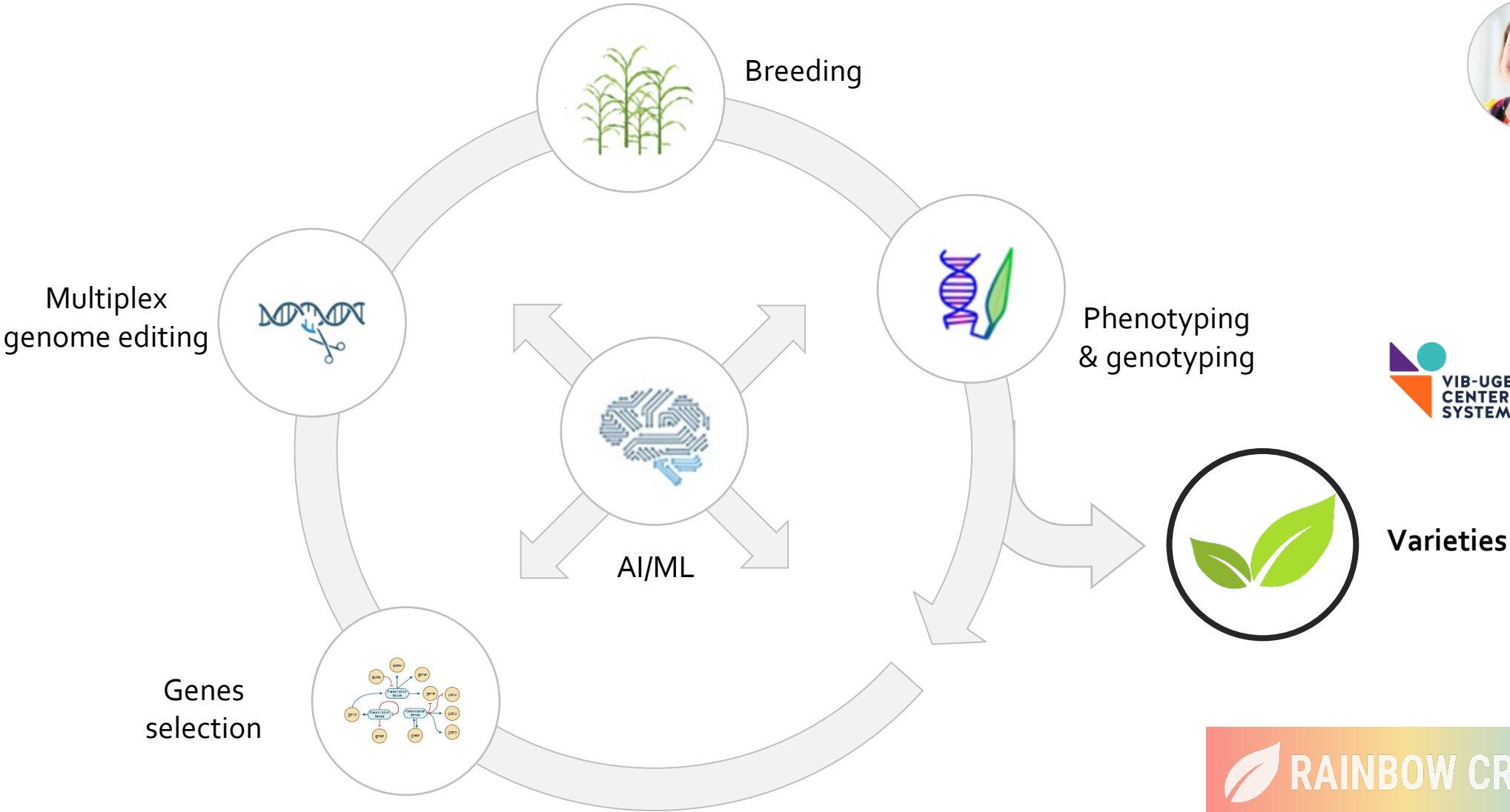


short term outcomes

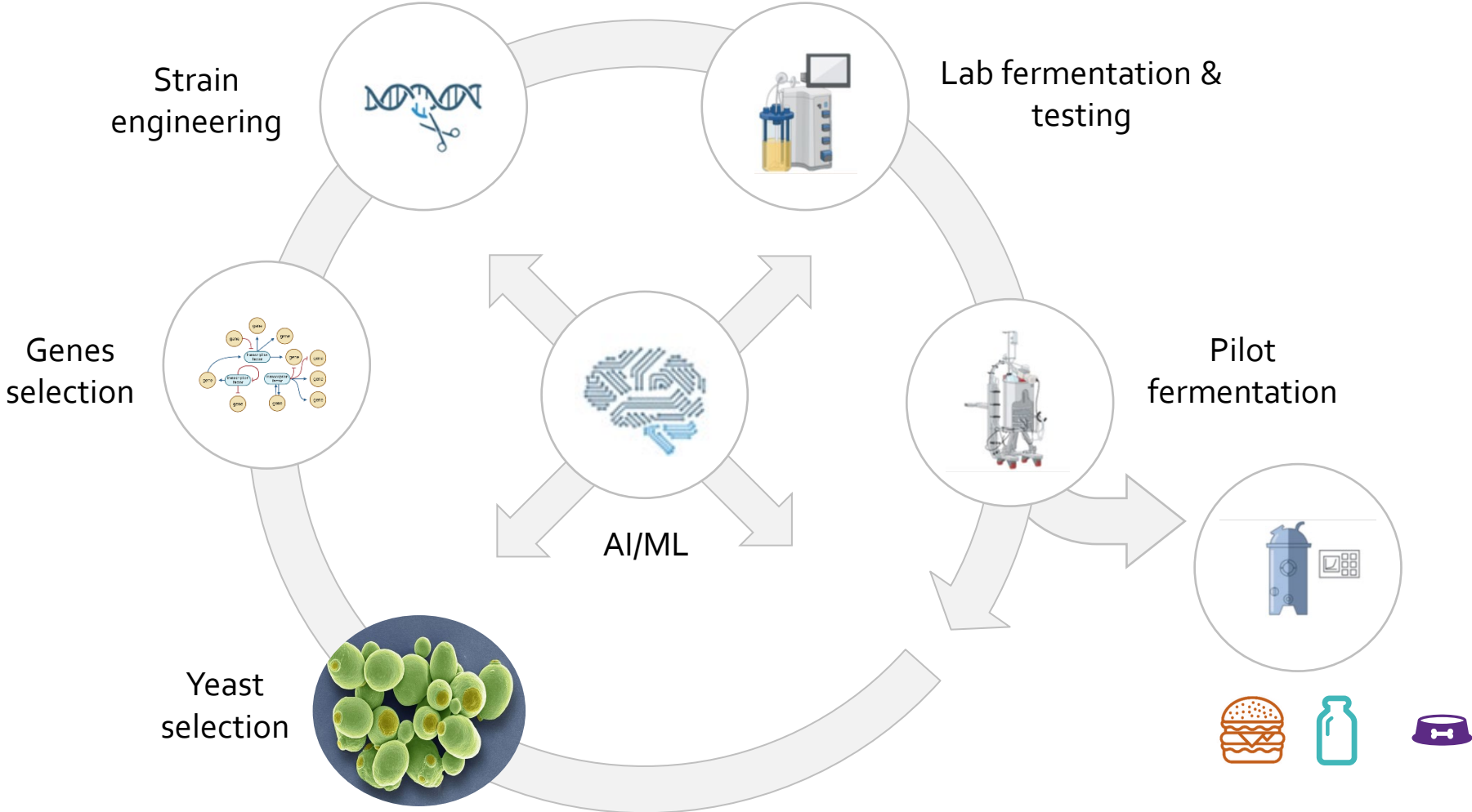


and long-term impact

Understand how plants resist drought, engineer it and create economic value



Understand yeast, apply to convert side streams into fats and create economic value

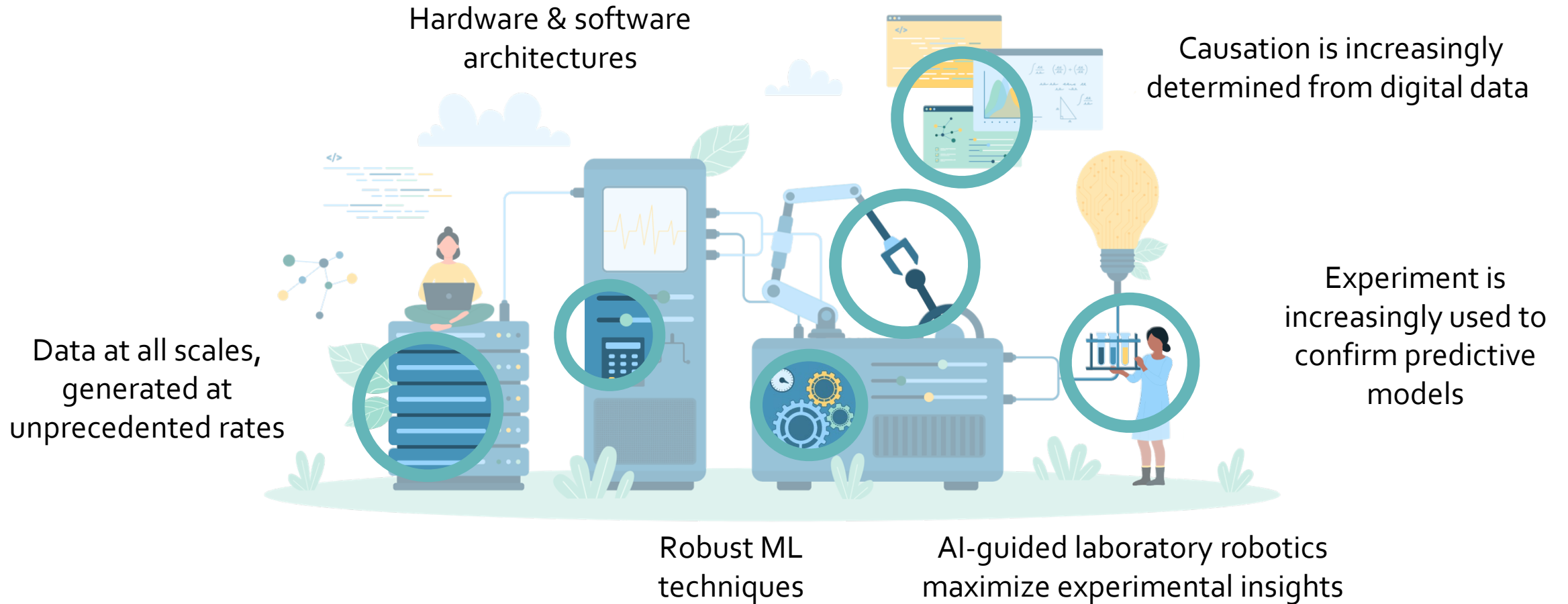


VIB 2024

- 10** Research centers @ 5 Universities
- 95** Research groups
- 10** Core facilities
- 1900** Co-workers
- 78** Nationalities

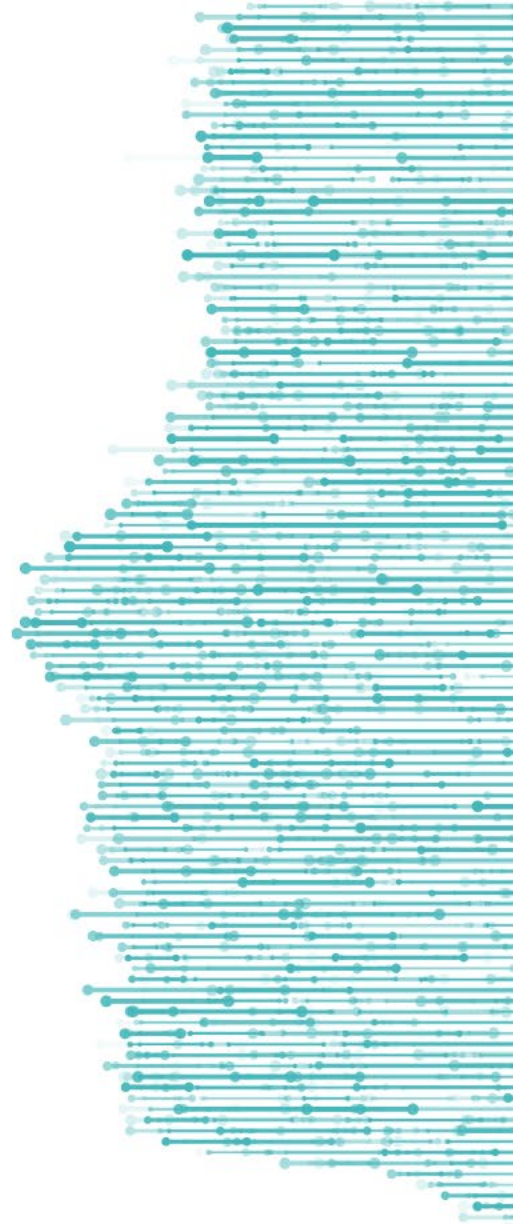


Computation will steer the research ship





Combining
machine learning, AI and computational biology to
enhance
our **understanding of life**



How to increase the societal impact of VIB science ?

Starting from Grand Challenges



Growing and aging population:
feed & keep healthy 9 bn in 2050



Climate change



Thematic areas



Innovative molecular-diagnostic paradigms



Innovative treatments



Personalized treatments

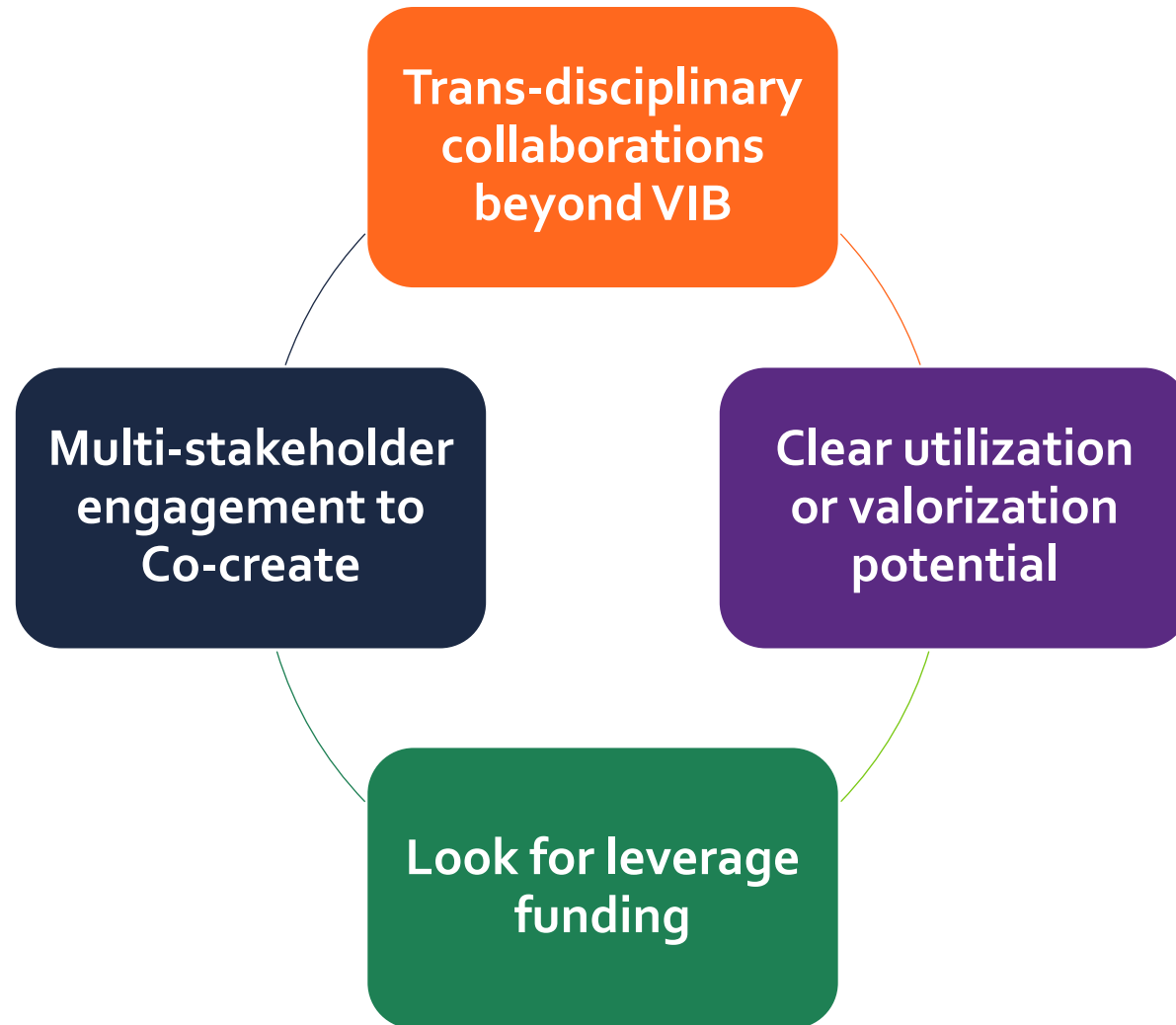


Climate action



Epidemic control

No business as usual



Monitoring societal value and impact

**1. Research
excellence**

**2. Translational
excellence**

**3. Leverage
excellence**

**4. Outreach
excellence**

Grand Challenges strives for societal impact



Science leads to...



short term outcome...



and long-term impact

and societal impact,
independent of scientific outcome

Multistakeholder dialogue to drive impact



Magische soja en zijn vrienden



Gauthier Wittamer
Spondyloarthritis patient





VIB Agro-incubator mission

Catalyze the existing Agbiotech ecosystem and support early-stage start-ups to accelerate innovative technologies for sustainable agriculture and food production



VIB Agro-Incubator



Automated and digitalized
research greenhouse
complex ($\approx 3.500 \text{ m}^2$)



Equipped **L1 laboratories**
($\approx 150 \text{ m}^2$)



Office area with meeting
rooms, individual units and
open spaces ($\approx 800 \text{ m}^2$)



Test field plot (2ha), in
collaboration with ILVO

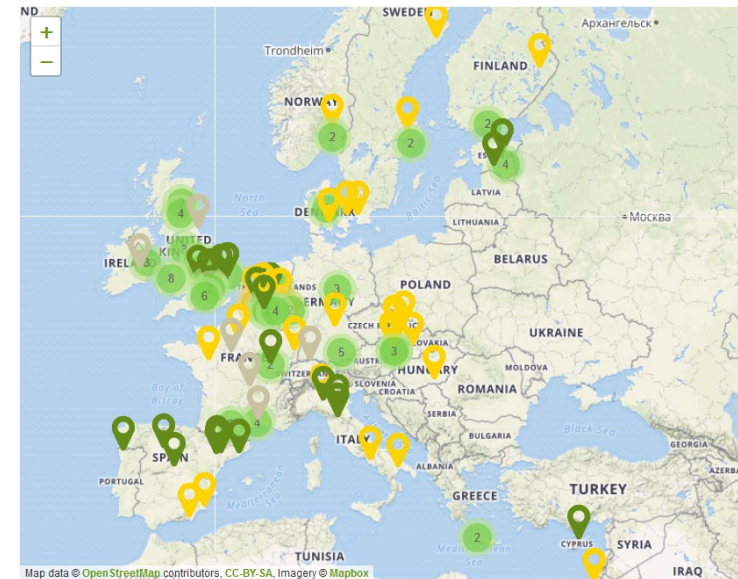
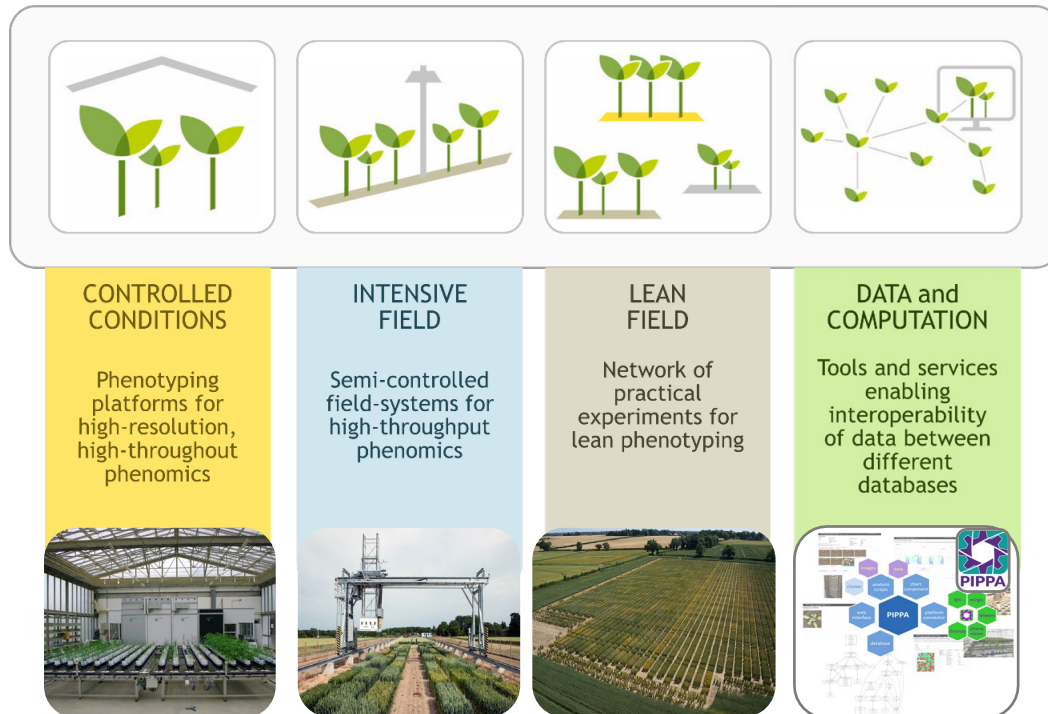


for industry and academia

EMPHASIS

Mission: Facilitating multi-scale plant phenotyping to analyse genotype performance in diverse environments and quantify the diversity of traits with a long-term perspective

How? By establishing a European research infrastructure and providing access to facilities, services and resources.



+200 installation across Europe

(https://emphasis.plant-phenotyping.eu/emphasis_infrastructure_map)

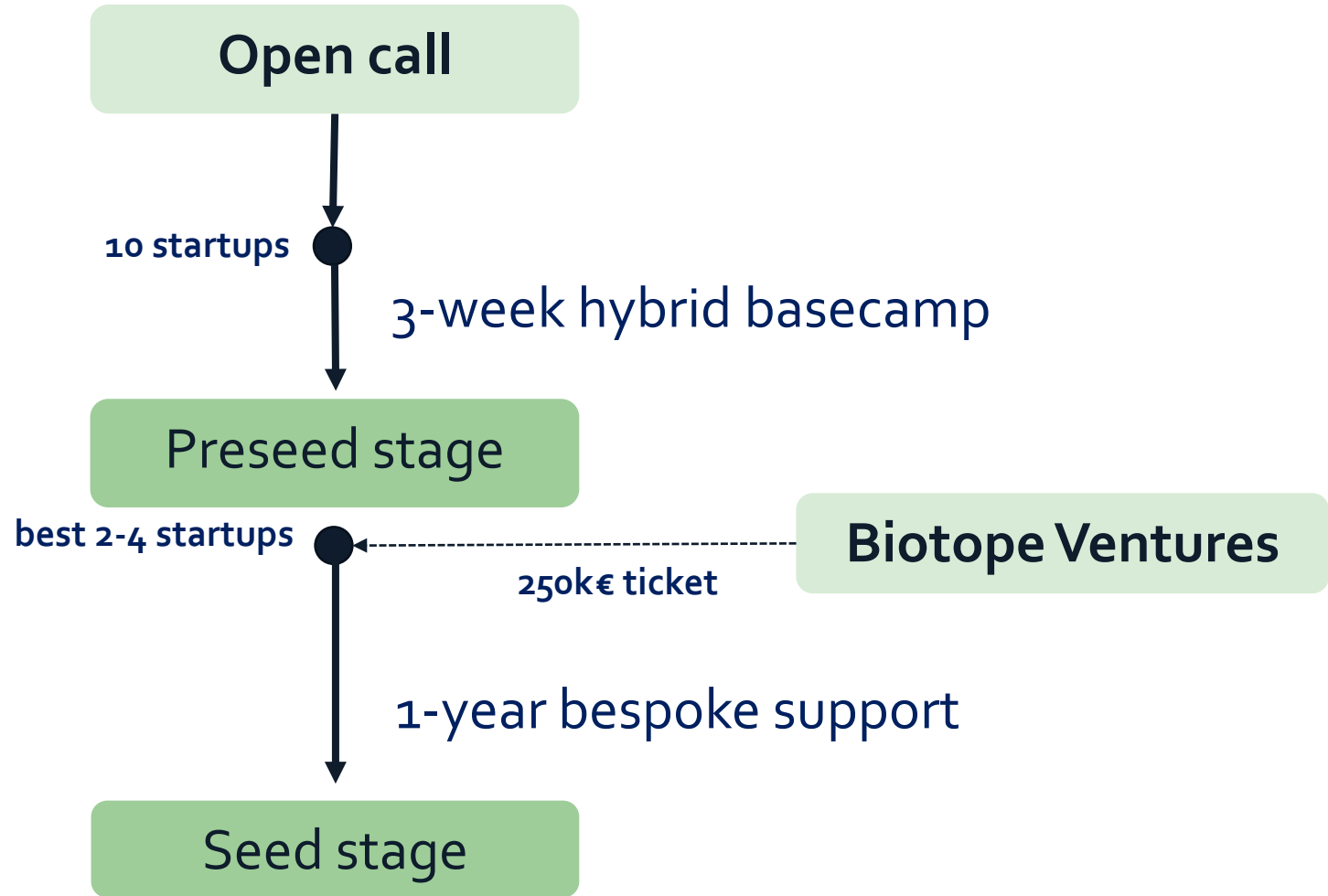
Source: EMPHASIS homepage

biotope *by VIB*

helping agrifood biotech innovations
from concept to viable business



biotope



The background of the slide is a photograph of a vineyard. The sun is rising in the upper left, creating a bright, hazy glow over the landscape. The rows of grapevines stretch from the foreground into the distance, leading the eye towards the horizon. The overall color palette is warm, dominated by greens and yellows.

eu sage

European Sustainable Agriculture
Through Genome Editing

www.eu-sage.eu

- **Represent** scientists in Europe working on genome editing
- **Advocate** the potential of genome editing for agriculture
- **Facilitate** science-based policy making



If the **future**
could whisper,
it would call out for

CRISPR

eusage

European Sustainable Agriculture
Through Genome Editing

Contact: oana.dima@vib.be



Did you know

that there are already more than 850 different genome-editing applications in crops published in peer-reviewed research studies?

HAVE A LOOK AT THE DATABASE:

www.eu-sage.eu/index.php/genome-search
or just scan the QR-code:



EU-SAGE DEVELOPED AN INTERACTIVE, REGULARLY UPDATED, PUBLICLY ACCESSIBLE ONLINE DATABASE OF GENOME-EDITED CROPS

**11 x
RETURN ON
INVESTMENT**



37 START-UPS (total)

+30 VC-backed start-ups
12 new spin-offs created between 2019-2023
1.84B € total capital investment
+920 direct employees (total)

INFRASTRUCTURE



BIO-INCUBATOR GHENT
6,111 m²
13 companies

BIO-INCUBATOR LEUVEN
14,900 m²
29 companies

BIO-ACCELERATOR GHENT
18,000 m²
3 companies

BRAND NEW BIO-INCUBATOR GHENT
5,500 m²
1 company

INTELLECTUAL PROPERTY



283 active patent families
342 patents granted in total (active)

VIB

INDUSTRIAL INCOME



138M € over the past 5 years

ENTREPRENEURIAL ACCELERATOR



3 VC FUNDS

4.5M € biotope ventures fund
76M € V-Bio Ventures I
110M € V-Bio Ventures II

biotopeby VIB

10 international start-ups
90 % mixed teams perfect gender balance

SUPPORTING THE BIOTECH ECOSYSTEM



INTERNATIONAL SCHOOLS
83 Ghent pupils
64 Leuven pupils

TALENT POOL
5 universities
4 strategic research centers



BIOTECH FEDERATIONS
flanders.bio
MEDVIA

INWARD INVESTMENTS



23 inward investments (total)
2.7B € total capital investment
+1,000 direct employees (total)

Figures: status 31/12/2023

