

HOW FLANDERS' 4 STRATEGIC RESEARCH CENTERS KICK-START YOUR R&D SUCCESS



Flanders Make

850 researchers

Product & production tech. and processes

Digital transformation & Industry 4.0



1,000 experts

the **world's largest** multidisciplinary research center

energy, materials, environment



1800 scientists from **60+** countries •
biotechnology •
life sciences •



- 5000 international researchers
- micro- and nanotechnology
- digital technology

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SCIENCE MEETS LIFE

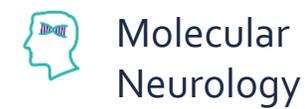
VIB

Strategic research in life sciences and biotechnology

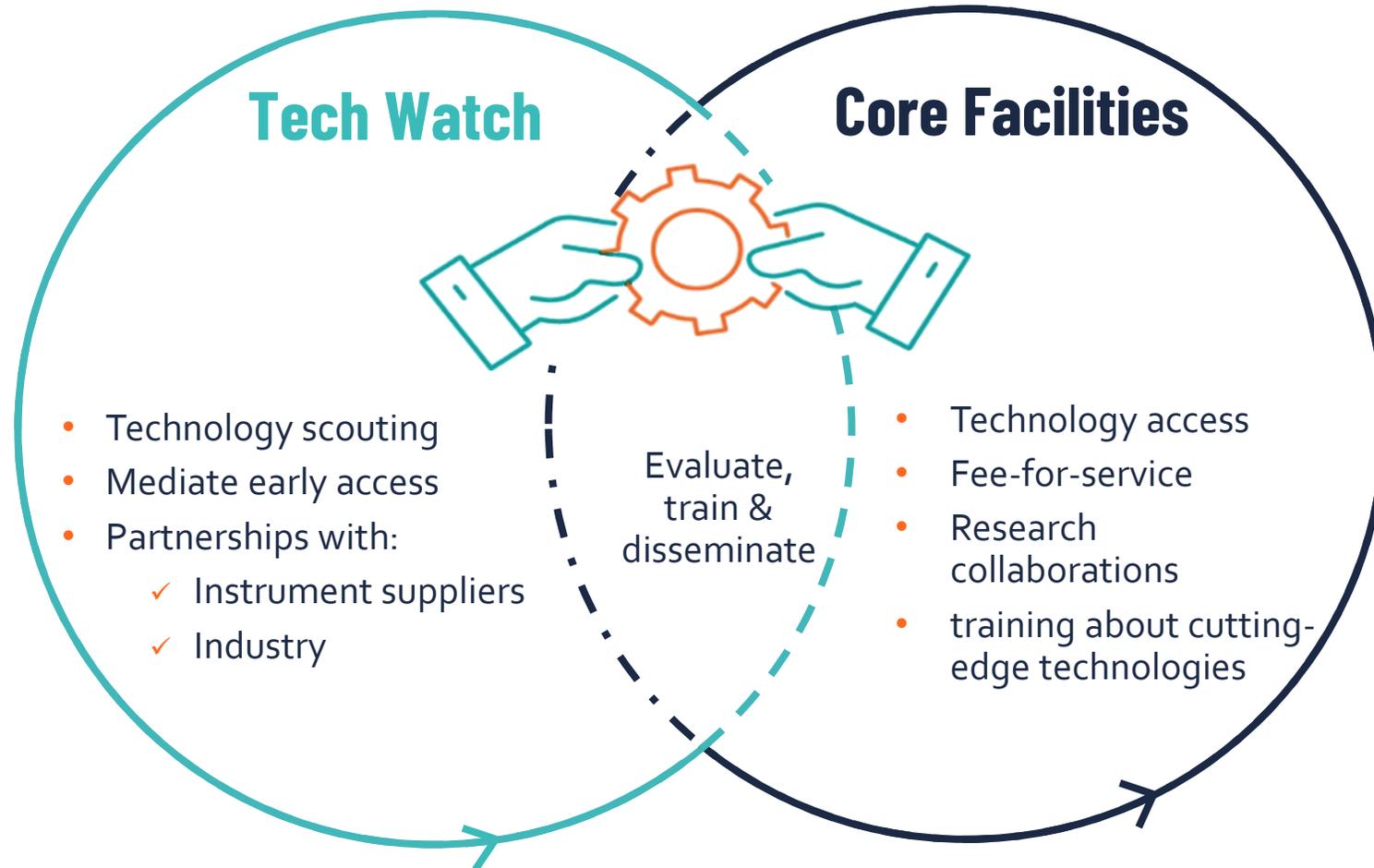


VIB in numbers.

- 5 universities
- 1,800 researchers & staff
- 75 nationalities
- 13 Core Facilities
- **9 Research Centers**

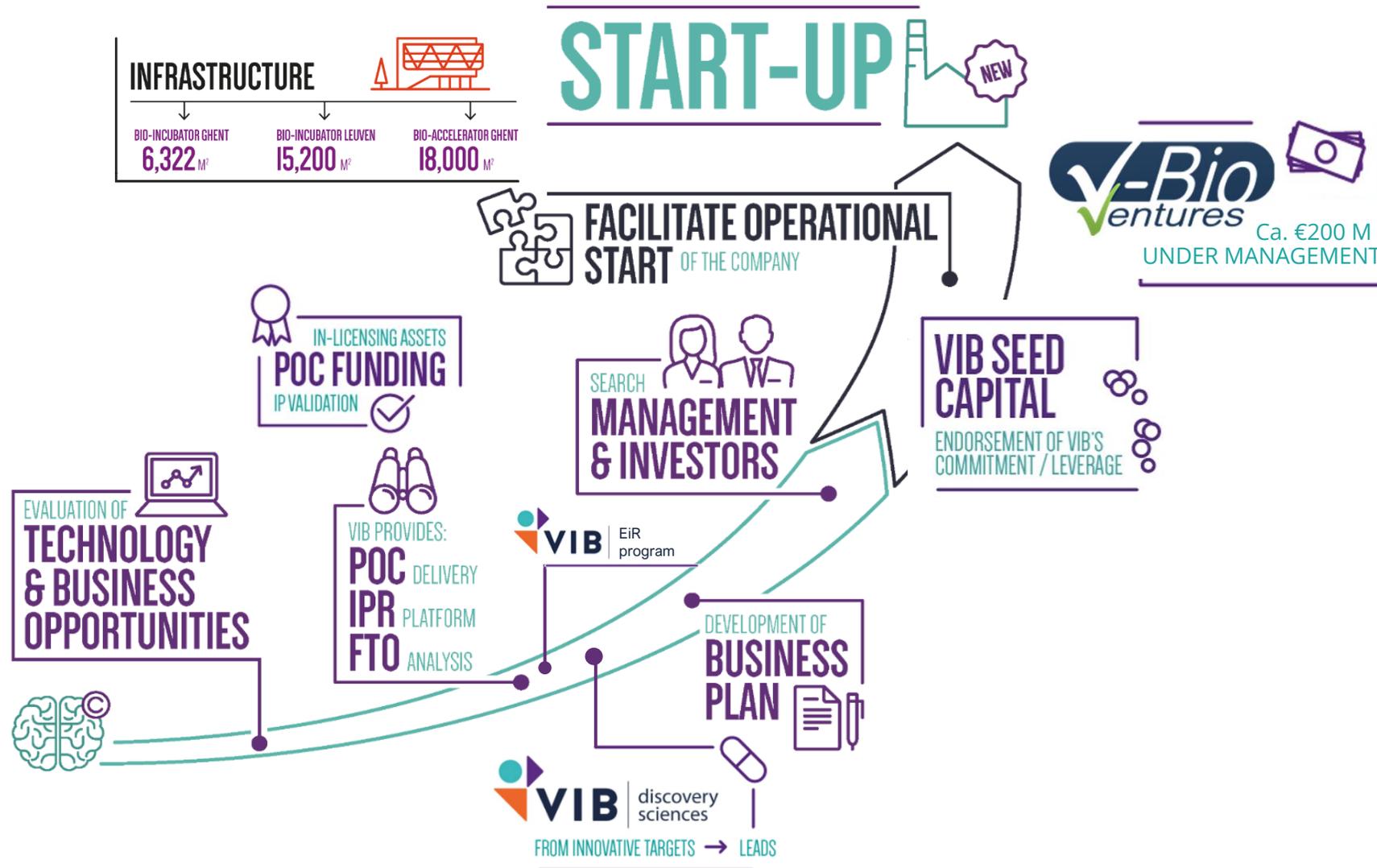


Top science with of the art Technologies,



-  Flow Core
-  Nucleomics Core
-  Proteomics Core
-  Screening Core
-  Metabolomics Core
-  Bioimaging Core
-  Single cell Core
-  Nanobody Core
-  Protein Core

Early-stage incubation of breakthroughs.



VIB Assets.

Antimicrobial resistance

- VIB's immunopeptidomic platform: Vaccine development via the identification of antigens from intracellular pathogens

Therapeutic antibodies

- SARS-CoV-2 and dengue multi epitope binding antibodies
- *Acinetobacter baumannii* targeting nanobodies
- S-layer binding nanobodies e.g. *Bacillus anthracis*
- Oral available nanobody derivatives against enteric infections

Donor organ preservation

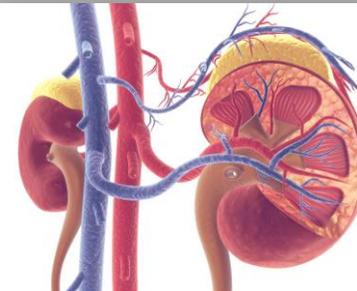
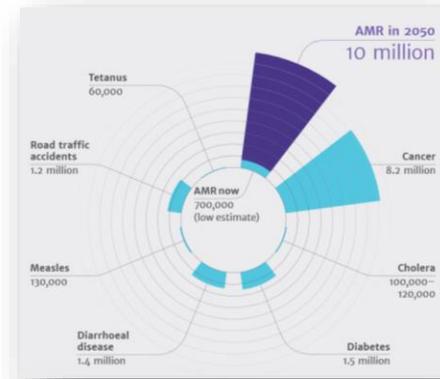
- Predict future function of donor organ before transplantation to increase the number of viable transplants

Chronic wound healing

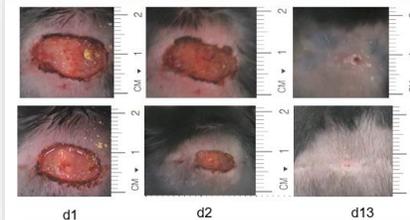
- Medical use IP in chronic wound healing in place
- Different inhibitor options (ASOs, antibodies or pharmacological inhibitors)
- Co-development opportunity

Drug Discovery pipelines

- Infectious diseases : via therapeutic antibodies
- Neurobiology: neurological disorders e.g. epilepsy
- Inflammation: e.g. lung & metabolic diseases



Images of wound progress





umec

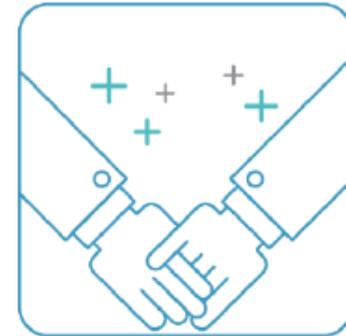
Embracing a better life



WORLD-CLASS INFRASTRUCTURE
> 12,000 M²
CLEANROOM
CAPACITY



MORE THAN
5,000 SKILLED
PEOPLE
FROM OVER 95 NATIONALITIES



A
TRUSTED PARTNER
FOR COMPANIES, STARTUPS &
ACADEMIA

World-class infrastructure

Hyperspectral imaging lab & demo room

Integrated imagers lab

Smart sensor lab

Exascience lab

RF & high-power lab

Photonics labs

200mm cleanroom

- Silicon pilot line for prototyping and low-volume manufacturing
- iSiPP200 and iSiPP50G photonics prototyping platform
- 200mm GaN-on-Si platform
- Quantum computing lab
- 5,200m²

GaN Lab

NERF labs

Measurement & testing lab

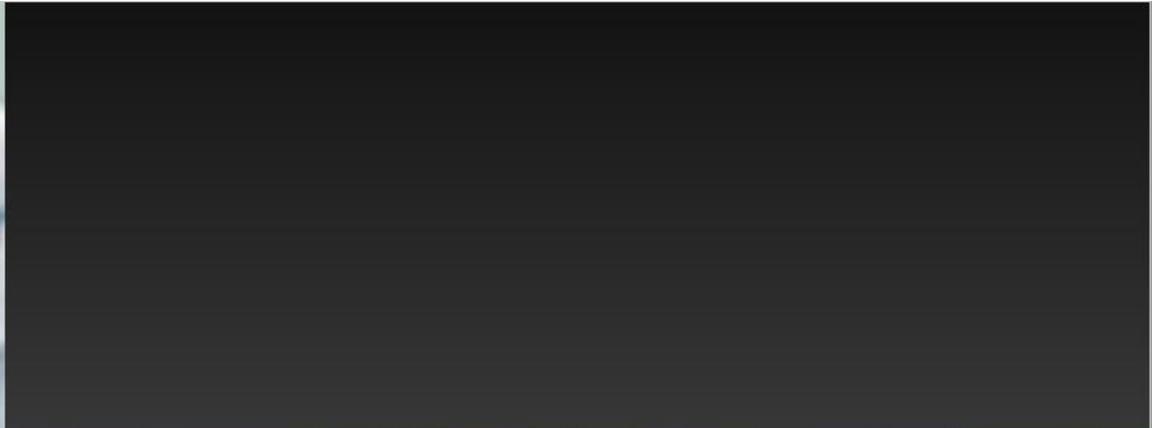
Material and device characterization labs

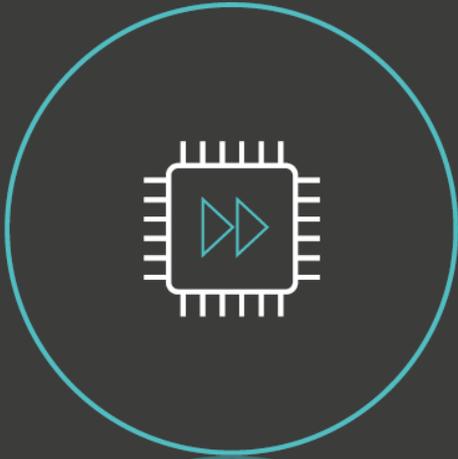
300mm cleanroom

- (High-NA) EUV, Attolab, advanced patterning
- State-of-the-art etch, implant, cleaning, metrology, deposition, ... equipment from leading-edge OEMs
- Ballroom type of cleanroom (7,200m², Class 1,000)
- 24/7 operational

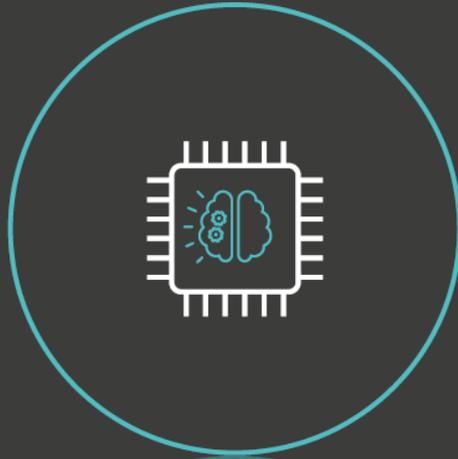
Bio labs

- Cell & tissue culture labs
- Optical labs
- Wet chemistry labs
- Clinical labs
- Pre-PCR lab
- Neuropixels lab

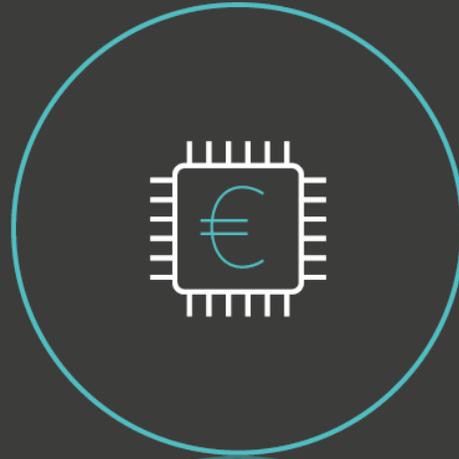




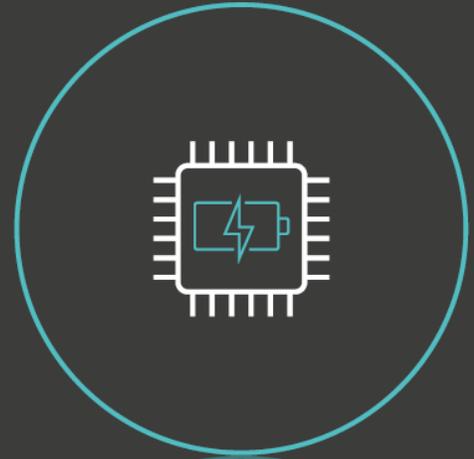
INCREASED
PERFORMANCE



INCREASED
COMPLEXITY



REDUCED
COST



REDUCED
POWER

FLANDERS MAKE

**Driving innovation
for a sustainable
future of our
industry**

TOWARDS A DIGITALLY TRANSFORMED, SUSTAINABLE COMPETITIVE INDUSTRY

25

ELECTRICITY PER MONTH
E NAME

Manufacturing industry
Industry with manufacturing challenges
Vehicles-machines-production systems





Video

https://www.youtube.com/playlist?list=PLP6P3b3pzcHmrKbT2xfa1S8UK9Zx1sn_Y

