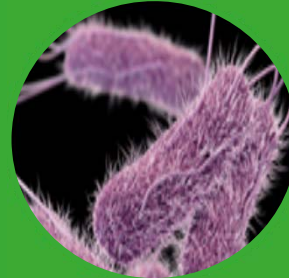
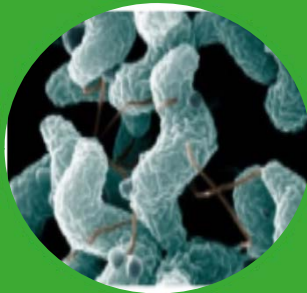
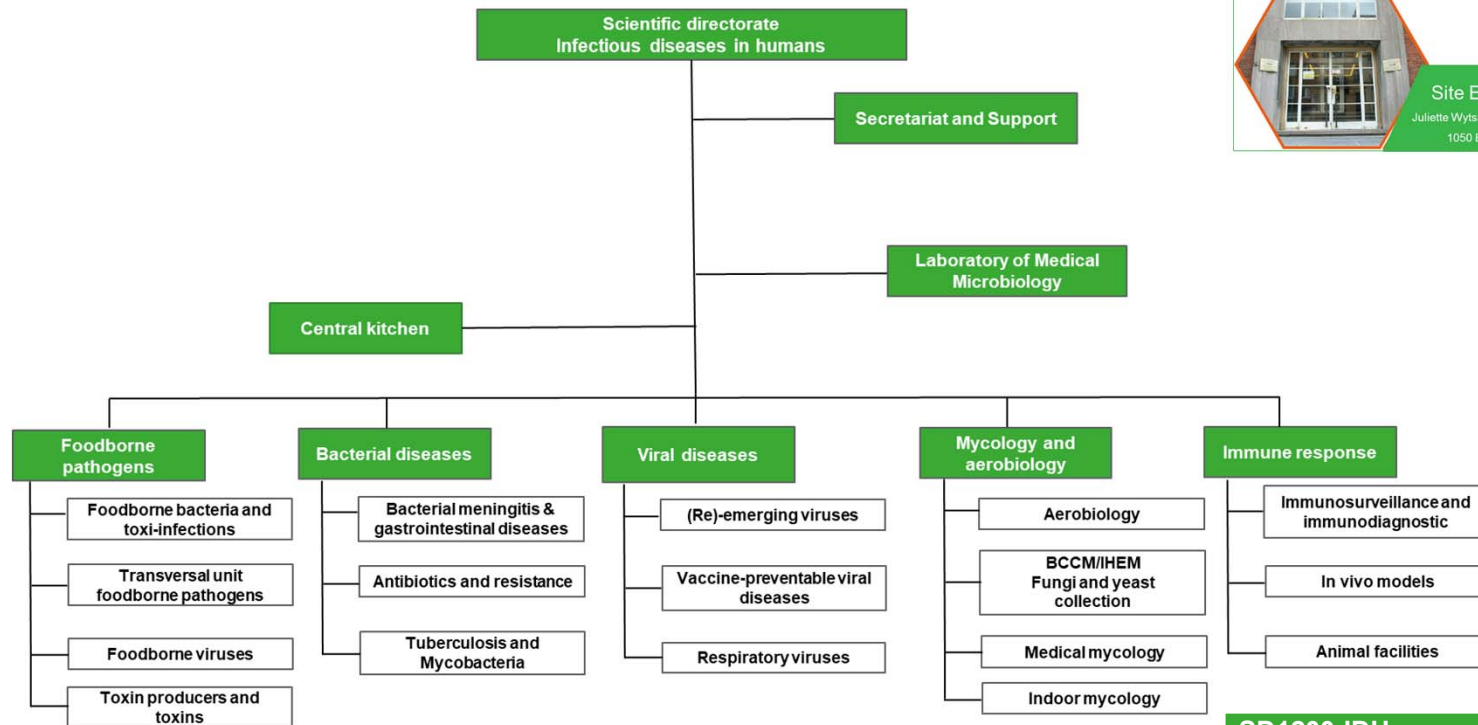


# SCIENTIFIC DIRECTORATE INFECTIOUS DISEASES IN HUMANS



Dr. Katelijne Dierick  
14th of June 2021

# Organisational chart

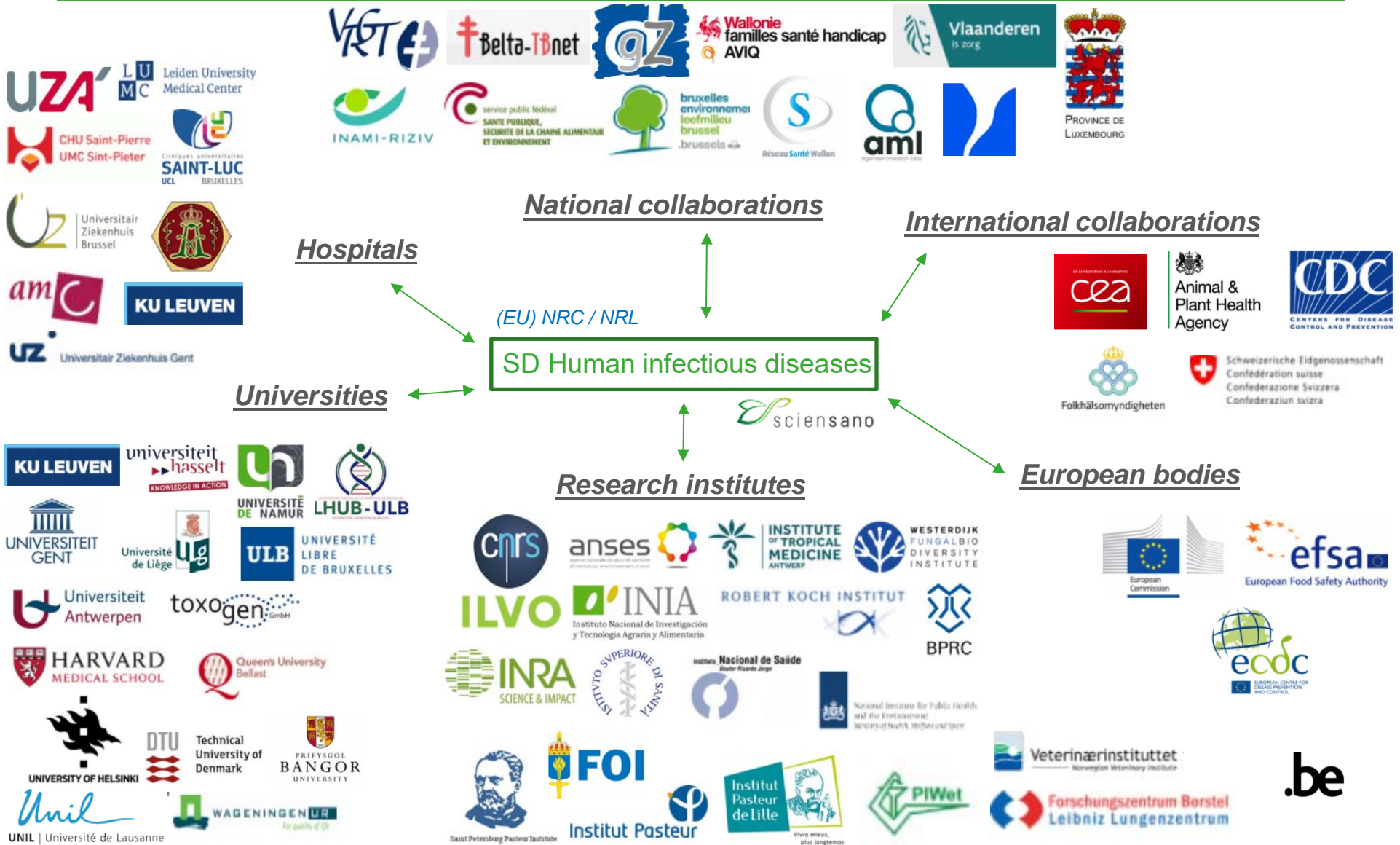


SD1200-IDH	2019	2020
Scientists	42	46
PhD students	14	17
Analists	54	57
Other	15	11
Peer reviewed articles	68	62
Oral presentations	28	13
Reports and advices/opinions	11	8
Projects	50	49
Analyses	97487	77261

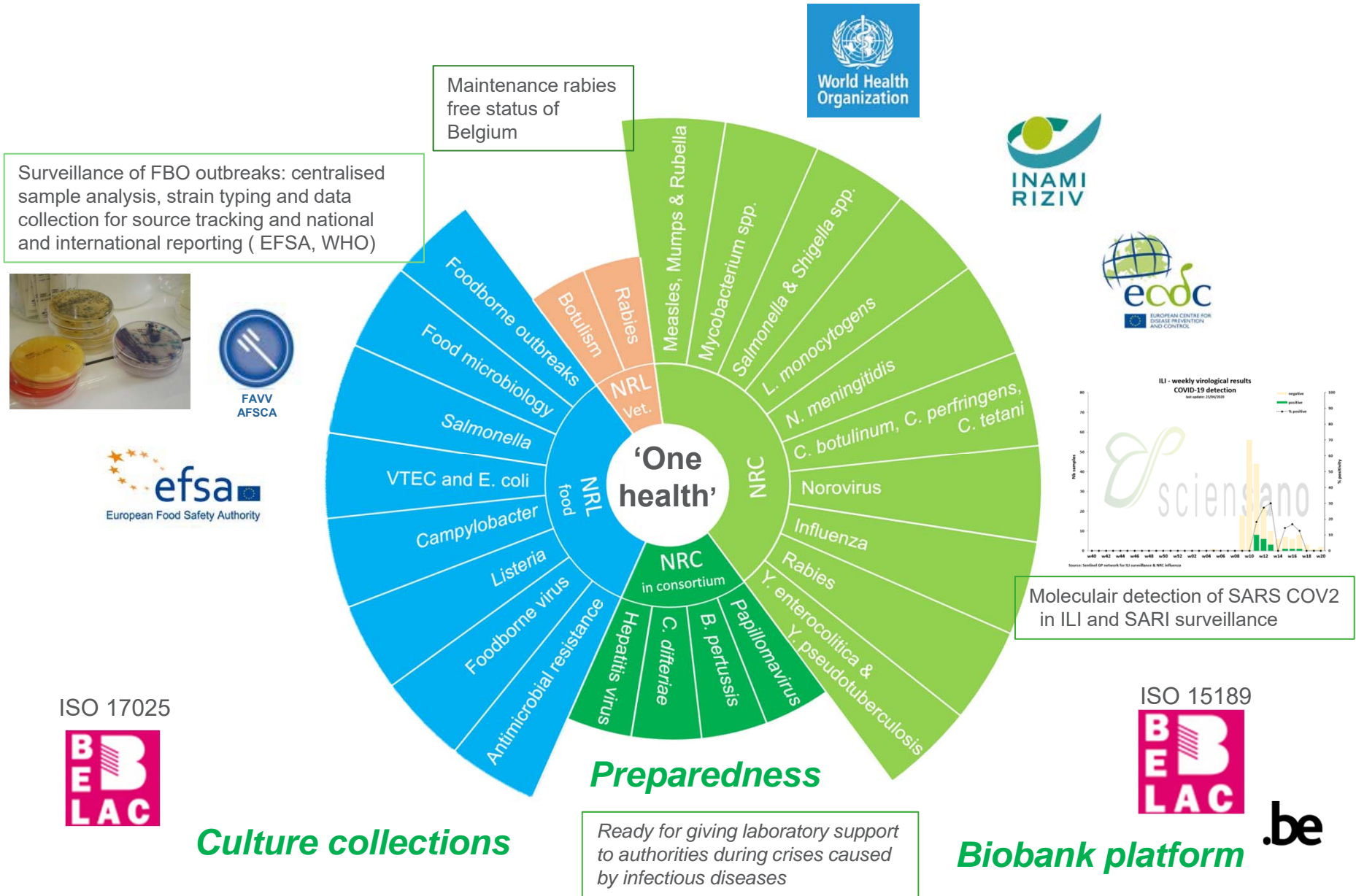
# Mission

- The rapid and early **detection and identification of pathogens** responsible for infectious disease in humans, their **toxins** and **antimicrobial resistance** and maintaining **collections** and databases of these pathogens.
- **The laboratory surveillance** of human infectious diseases and zoonoses and their antimicrobial resistance and the evaluation of methods for **prevention or treatment**.
- Surveillance of **allergenic pollen and mold spores** in the air.
- **Innovative research** related to infectious diseases in humans, and diseases caused by biological contaminants in the air, their detection and their treatment
- Provide **support to health policy** by conducting **specialized analyzes**, providing **expert advice** and contribute to a more healthy life for everyone.

# SD Infectious diseases in humans works in a network



# Laboratory surveillance of infectious diseases embedded in international networks: 14 NRC's for clinical microbiology and 10 NRL's for food/animal microbiology



# Other important activities beyond reference tasks

- Laboratory surveillance of **AMR** in bacterial isolates from human, animal and food origin in our NRC/NRLs
- Quality control of **phages for therapeutic use** in humans in case of untreatable diseases because of infection with resistant bacteria
- In house **development of laboratory methods** for surveillance of (re-)emerging human pathogens
- Research on **host-pathogen interactions**
- Research on **new drugs and vaccines** for human infectious diseases
- Laboratory surveillance of **SARS CoV2 in wastewater**
- Monitoring of **outdoor and indoor** biological contamination



Birch (*Betula* spp.)



# Important tools and resources for research within our scientific directorate

## Biological collections

- **Central biobank platform** : operational management of biobank modules at Sciensano, 3 new modules for COVID
- **BCCM-IHEM** : Belgian culture collection for fungi and yeast of medical importance
- **Microbial culture collections of NRC's and NRL's**

## Laboratory animal facilities:

- **In vivo animal models** to study host-pathogen interactions and new treatments and vaccines:
  - Mycobacterium
  - Rabies
  - SARS CoV2
- **Bio-assay for diagnosis** (botulism)
- **Animal accommodation** for other directorates within Sciensano

## Scientific Directorate *Infectious diseases in humans*

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### Webpage

<https://www.sciensano.be/en/about-sciensano/sciensanos-organogram/infectious-diseases-humans>