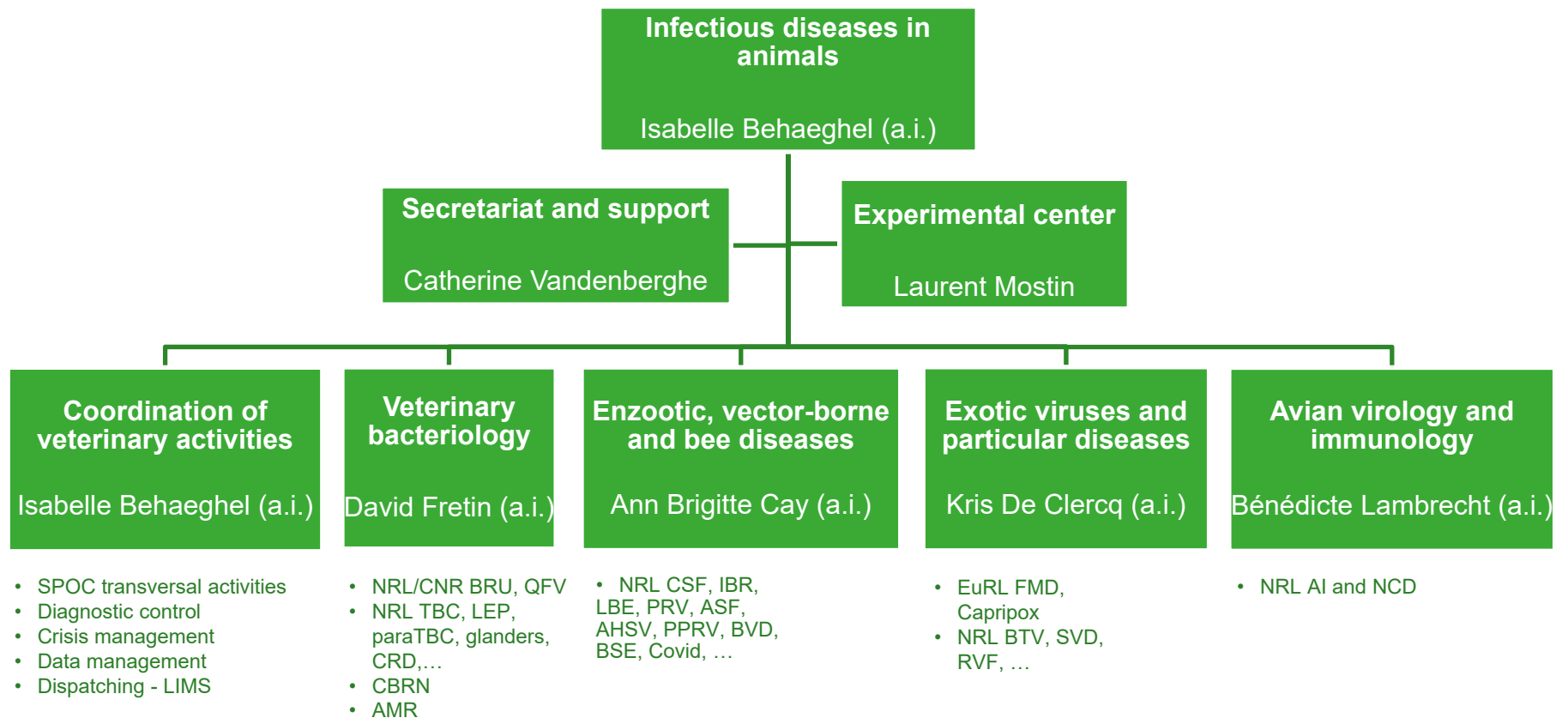


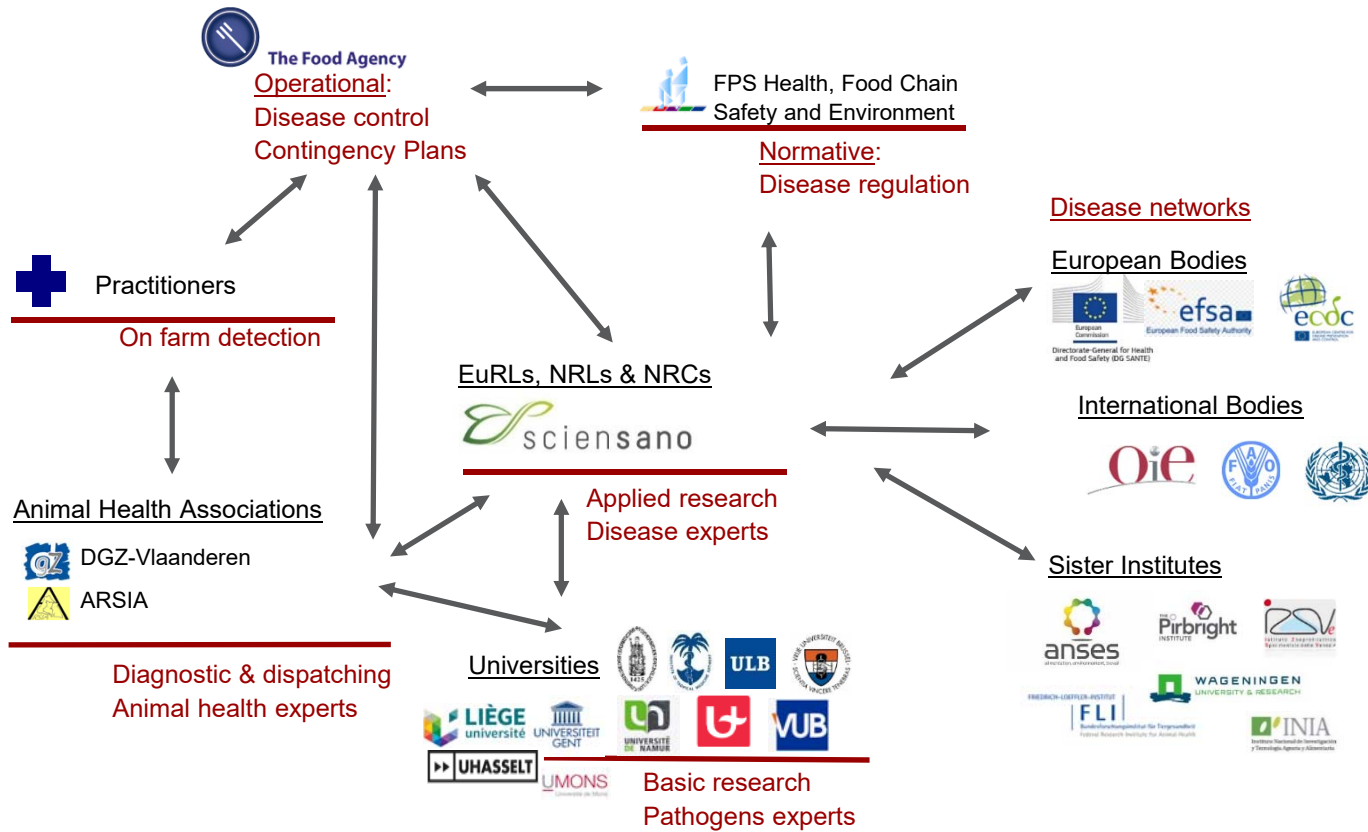
SCIENTIFIC DIRECTORATE INFECTIOUS DISEASES IN ANIMALS

Isabelle Behaeghel
14th of June 2021

SD Infectious diseases in animals



Our Network



Our Mission

Our scientific department ensures the rapid **identification and characterization** of the main known and emerging animal and zoonotic pathogens.

Based on our **research**, we also provide **opinions** to support the **animal health policy** and we develop and validate the tools needed to put in place strategies to control these pathogens (e.g. vaccines, PTs, certification...).

1. Identification and characterization

Development and validation of methods

Analyses

2. Scientific advise and expertise

Surveillance – health policy

Prevention

3. Research

Service

1. Identification and characterisation of pathogens

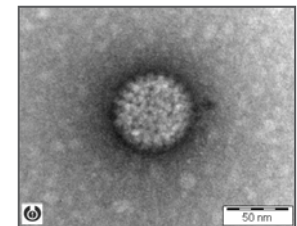
- **Development and validation** of methods
 - Serological, immunological and molecular methods
 - Next Generation Sequencing
- Assuring the **quality** of veterinary diagnostics
 - Production of reference material
 - Organization of proficiency test, ISO 17043
 - Certification of veterinary diagnostics
- **Analyses**
 - First line testing and confirmation tests
 - Analysis for certification
 - ISO 17025

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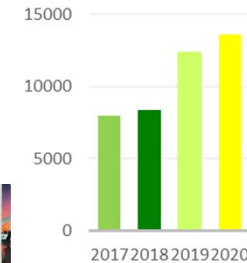
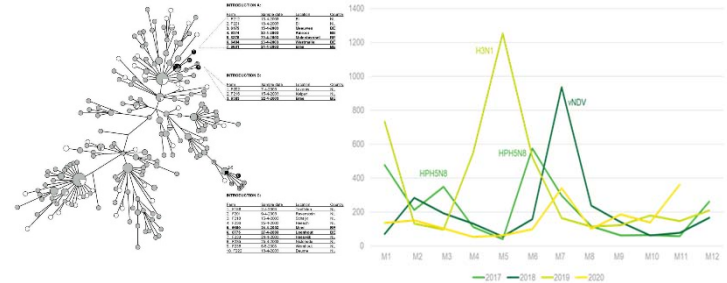
2. Scientific advise and expertise

- **Advise** for policy makers
 - NRL (+/- 40 pathogens) and EuRL (Capripox – FMD)
 - Surveillance program
 - Legislation, New Animal Health Law
 - Epidemiological evolution
 - Risk evaluation (zoonosis, risk factors, ...)
 - Wild life
- **Prevention** of diseases
 - Vaccine efficacy
 - Preparedness - expertise
 - BSL3 facilities
- **One Health**; zoonotic diseases, vectors, AMR



3. Research: areas of common interests

- Immunology
 - Host-pathogen response
 - Correlates of protection
- Experimental infections (BSL3 facilities)
 - Infection models - Virulence studies
 - Challenges -Transmission studies
 - Vaccine safety and efficacy
- Epidemiological studies
 - Phylogeographic analysis
 - Optimization of tests, aspecific reactions
- Development of new diagnostic methods
- Characterization of pathogens
 - Whole genome sequencing, phylogenetic analysis
- Doctoral students and guest professors



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Scientific Directorate *Infectious diseases in animals*

Contact

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Enzootic, vector-borne and bee diseases

Exotic viruses and particular diseases

Avian virology and immunology

Experimental center

Secretariat and support

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