

# Experience of EMA innovation support from a university perspective

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# ITF and EU Innovation Network for academics?

- **early** and informal dialogue
- to **proactively** identify scientific, legal and regulatory issues of emerging therapies, technologies and borderline products
- to be much earlier than when one would normally seek scientific advice
- provide **guidance** in the development process and road to market
- ensure **EMA and NCA awareness** and preparedness for assessment of the most recent developments in innovative medicine



## Research at Ghent University

Watch innovation unfold

### Research at Ghent University

Ghent University prides itself on being a knowledge hub which is not only forwardthinking but also self-questioning and authentic.

Our university motto is 'Time to think'. As a consequence, scientific curiosity, innovation, and academic freedom are at the core of our organization. We are well placed to take a leap of faith, many a researcher has been given the opportunity to pursue his or her dream field of study, often resulting in well-established projects that generate great research.

We offer a platform for the brightest minds, and give researchers the cut of the best class. And it's not just our research that is cutting-edge and pioneering. Also our policy of thought-provoking and creative aimed at creating the best environment for our research community.

This makes us unique among the Belgian universities.

### Investing in Flanders' knowledge potential

Number of PhD degrees awarded

672 PhD degrees awarded in 2014

### Where do our graduates work 3 years after their PhD?

Sector	Percentage
Academic research	25%
Industry	20%
Government	15%
Non-profit	10%
Entrepreneurship	10%
Other	15%

### Scholarly impact

Number of peer reviewed publications

17 High Impact Publications according to Thomson Reuters

### Researcher development

We arrive to build a research nest

17 High Impact Publications according to Thomson Reuters

### Research expenditure

€ million

€ 100 million research expenditure in 2014

### Research footprint

Fields of science with high publication rate and citation impact (Web of Science 2000-2014)

### Research infrastructure

University Library Facilitating open knowledge creation

### Research track record

500+ research articles and patents

100+ research projects

### International research network

Development cooperation partners (2014-2016)

### Technology transfer

Bringing research to daily life

727 research articles

422 patents

436,071,304 value of research

# DISCOVER WHY WE ARE THE BEST

## ShanghaiRanking's Global Ranking of Academic Subjects 2017 - Veterinary Sciences

Field: Life Sciences

Subject: Veterinary Sciences

Methodology

World Rank	Institution*	Country	Total Score	Score on PUB
1	Ghent University		376.9	78.8

# An entrepreneurial university

- stimulate transfer of technologies to industry and society
- deliver proof of concept
- be pro-active and build networks
- create partnerships to boost innovation



ENERGY & CLEANTECH	MATERIALS	ELECTRONICS & PHOTONICS	ICT	MEDICAL	PHARMA	BIOTECH	FOOD
	DuraBuildmaterials		e-poly	HyCT	BIOMARKED		FOOD KNOW
SET GHENT UNIVERSITY SUSTAINABLE ENERGY TECHNOLOGIES	COMPOSITES GHENT UNIVERSITY	nb-photonics Center for Nano and Biophotonics Ghent University		IDLab INTERNET & DATA LAB	CHEMTECH		Aquaculture Ghent University
Clean Chem GHENT UNIVERSITY	CHEMTECH		victoris		PROVAXS	SynBiOmIX	
	METALS GHENT UNIVERSITY			bimetra Clinical Research Center Ghent	DISCOVERE FROM ECONOMIC DATA TO INNOVATION		Cropfit
			know				

# CENTRAL TECHNOLOGY TRANSFER OFFICE

Veterinary Innovation Day - 19 April 2018, EMA London

PROVAXS 

  
GHENT  
UNIVERSITY



**Scope: immunity and infectious diseases in food producing animals**

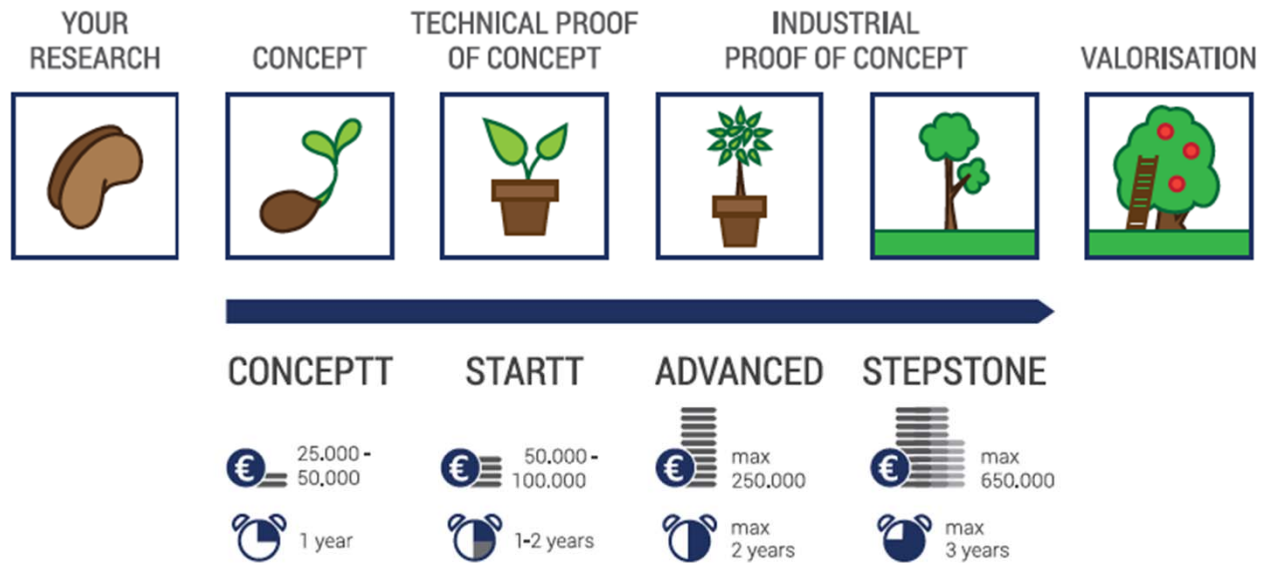
**Facilitate collaboration and tech transfer to industry/society**

**Veterinary vaccines and other biologicals**

**Veterinary diagnostics**

**Feed additives  
(impact on immunity and health)**

The **INDUSTRIAL RESEARCH FUND** provides **PROOF OF CONCEPT** funding to all AUGent researchers with **INNOVATIVE** projects



[www.ugent.be/iof](http://www.ugent.be/iof)

[iof@ugent.be](mailto:iof@ugent.be)



TECHNICAL PROOF OF CONCEPT



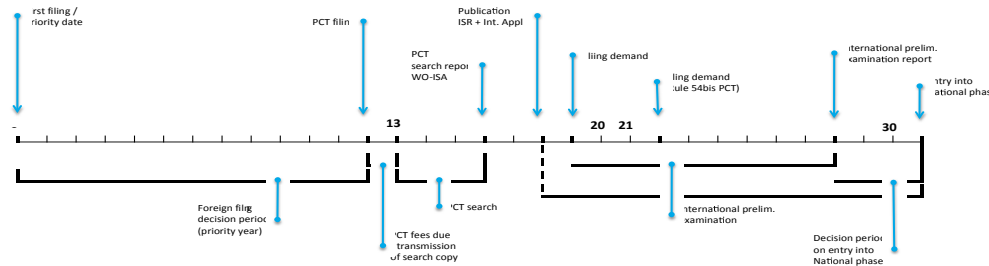
INDUSTRIAL PROOF OF CONCEPT



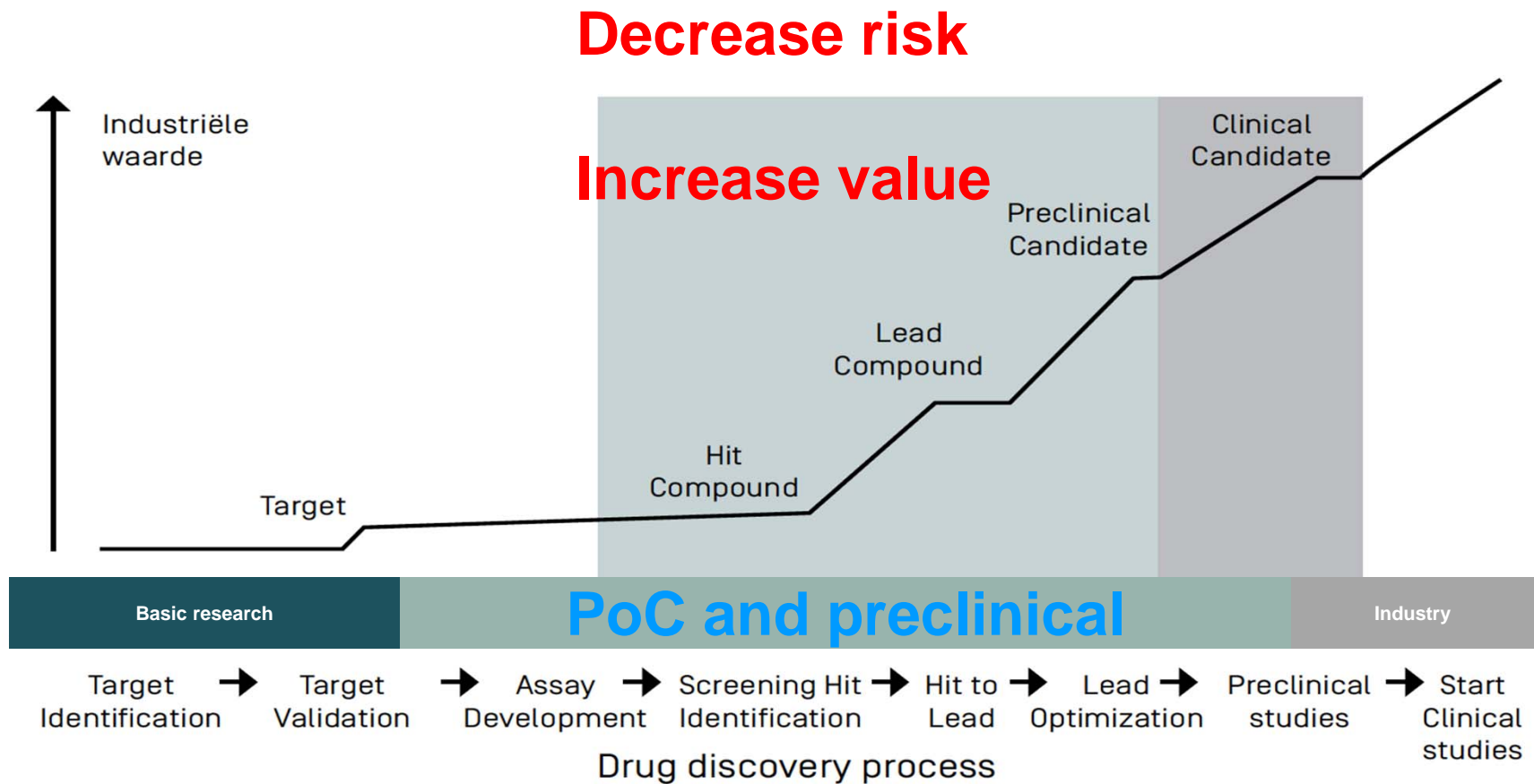
VALORISATION

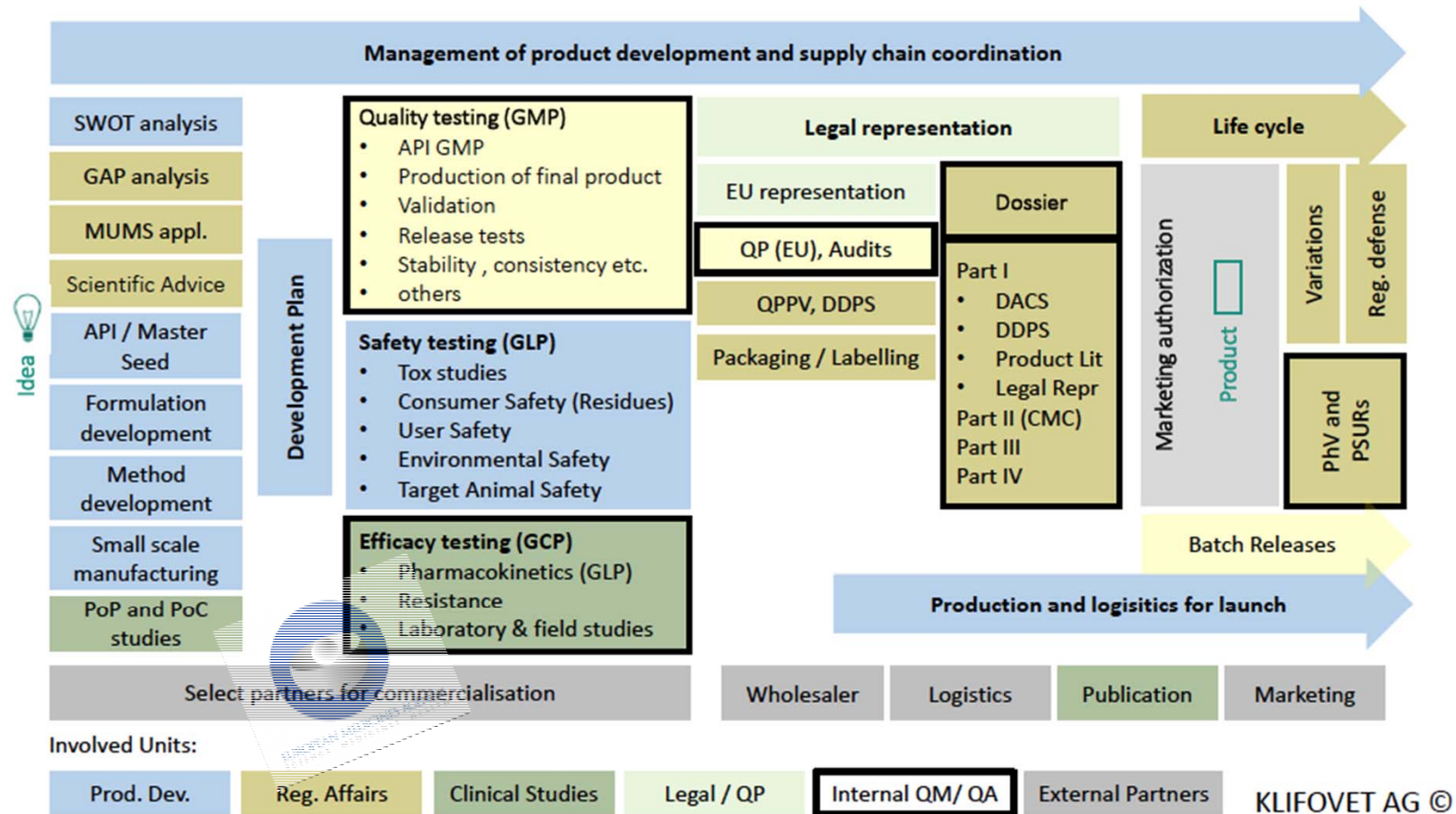


STARTT      ADVANCED      STEPSTONE









# ITF meeting request

<b>Product/technology</b>	<p>A novel vector for the development of oral vaccines for pigs.</p> <p>The novel vector shows good efficacy (protection) and safety (no adverse effects).</p>
<b>Topics to be discussed</b>	
<b>Scientific:</b>	
<b>Regulatory:</b>	<p>What are the legal and regulatory issues on the use of the vector for oral vaccination and which Agency procedures relate to this development?</p> <p>Do we need to consider specific guidelines in the design of experiments to deliver further proof of concept on efficacy and safety?</p>
<b>General:</b>	<p>We intend to perform additional experiments to deliver further proof of concept on efficacy (protection) and safety (adverse effects) of the vaccine vector at larger number of animals.</p> <p>Do we need to address other aspects of safety and efficacy that are critical for the use of the vector in commercial vaccines?</p>



# Topics discussed

- support from ITF and EMA to academia
  - the UGent model (first meeting)
  - from ITF to scientific advice
- regulatory issues on the use of the vector vaccine
  - presentation of the technology and proof of concept
  - guidelines and directives on use and registration of the vector



# Good initiative!!



# Evaluation

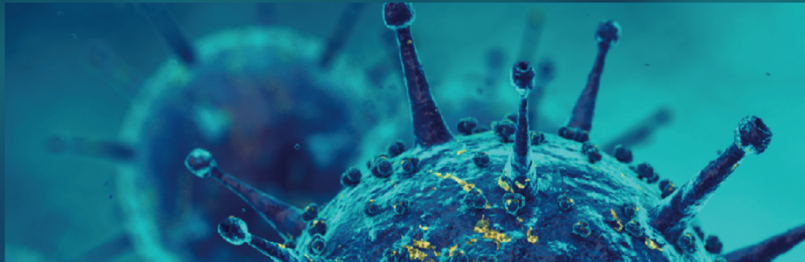
- ✓ early and informal dialogue (formal process)
- ✓ to proactively identify legal and regulatory issues: efficacy, persistence, maternal Abs, GMO, GMP
- ❓ to be much earlier than when one would normally seek scientific advice: universities are not eligible for reduced fee for scientific advice
- ✓ provide guidance in the development process and road to market: what can be done by the university and what by a start up/partner
- ❓ ensure EMA and NCA awareness: interaction between ITF and national innovation offices?
- ❓ continuity in follow up meetings or meetings on other technologies?



# ITF advice taken into consideration in application for follow up project

Titel	Safe universal vector vaccine for oral vaccination in swine
Promotor	Prof. dr. Hans Nauwynck
Financiering	€90.000
Looptijd	18 maanden
Start- en einddatum	15/01/2018 – 15/07/2019
WBS-element	IOFPRO2018000301

- safety & efficacy on a larger number of animals
- other applications: other antigens/diseases, sows



6 June 2018  
Brussel, Belgium

## Matchmaking event infectious diseases 2018

Home Focus How does it work? Location Contact

### Research and innovation on monitoring and control of infectious diseases (One Health)

Find the appropriate partners to realize your research objectives

STAR-IDAZ.be, the representation of Belgium in STAR-IDAZ IRC, together with Flanders Vaccine and Enterprise Europe Network Vlaanderen join forces to organize an event to stimulate collaboration between researchers in the field of monitoring and control of infectious diseases (One Health approach). This matchmaking event will offer participants the opportunity to expand their network, find potential collaboration partners with the right expertise, and establish new project consortia.

#### REGISTRATION

Open until 30 March 2018

#### LOCATION

Victor Hortaplein  
Brussel, Belgium

#### ORGANISED BY



In cooperation with

