



± 500 000



bruxelles
environnement
leefmilieu
brussel
.brussels 

± 90 000





RE-Place

ALTERNATIVE METHODS TO
ANIMAL TESTING

Progress of the RE-Place project

M. Van Mulders, M. Everaert, V. Rogiers, B. Mertens

Monday 27th of March, 2023

Study Day Animal Welfare Leefmilieu Brussels

Brussels, Belgium

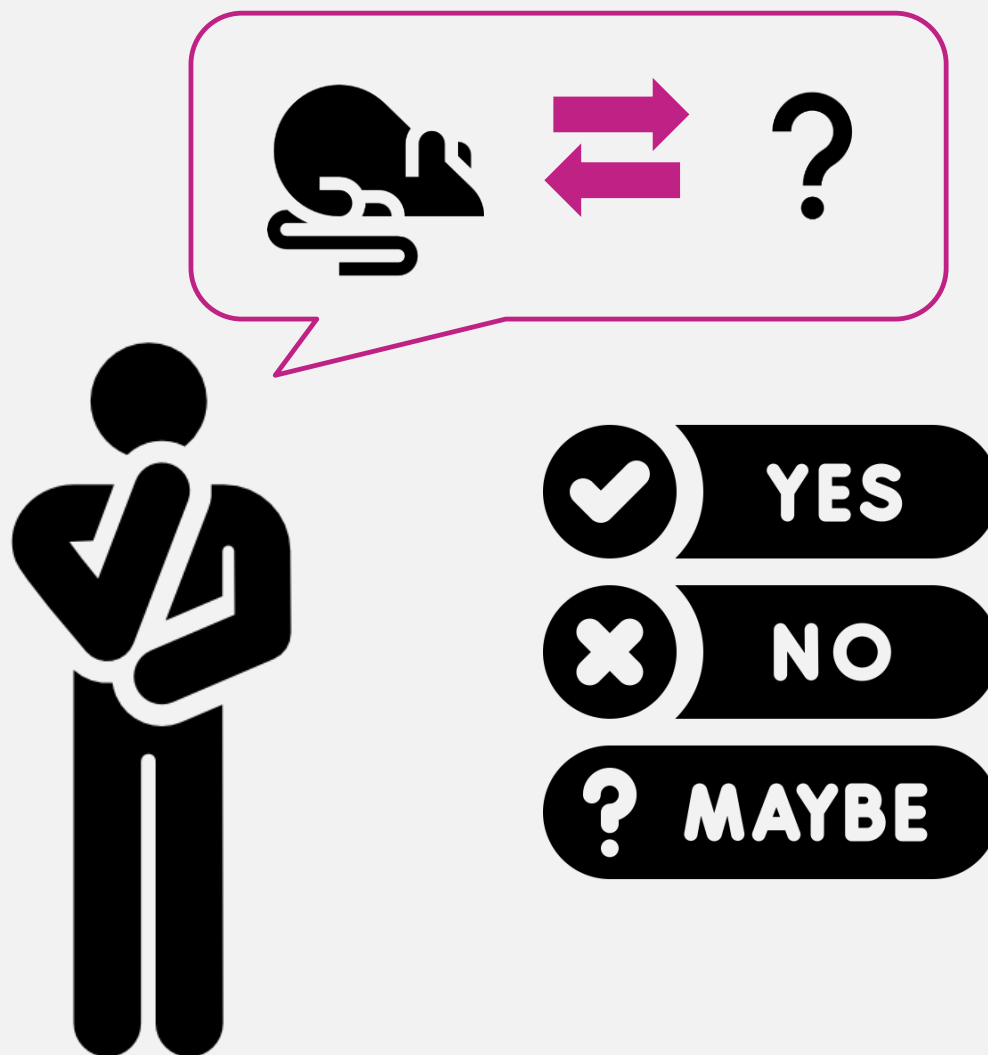


RE-Place

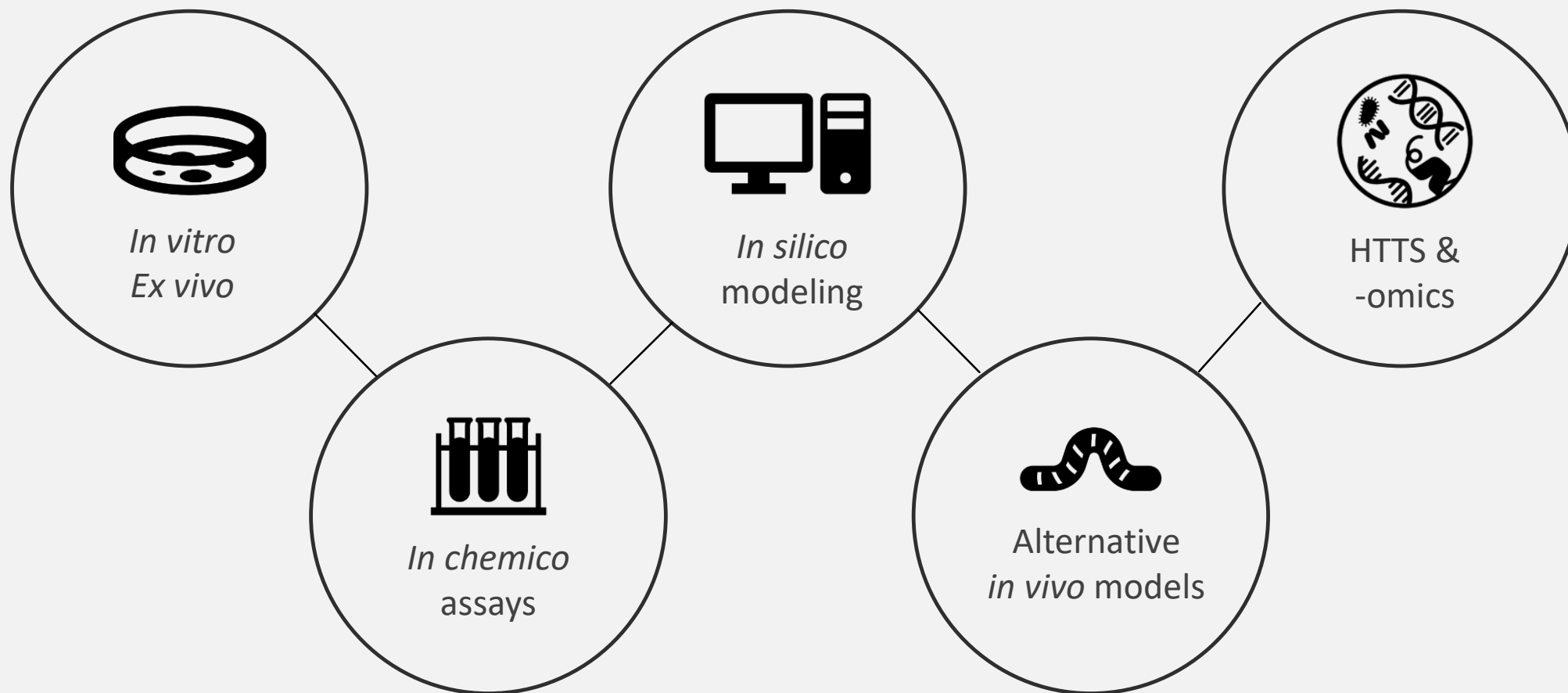
ALTERNATIVE METHODS TO
ANIMAL TESTING

Launch of the RE-Place project

Can we replace animal testing?

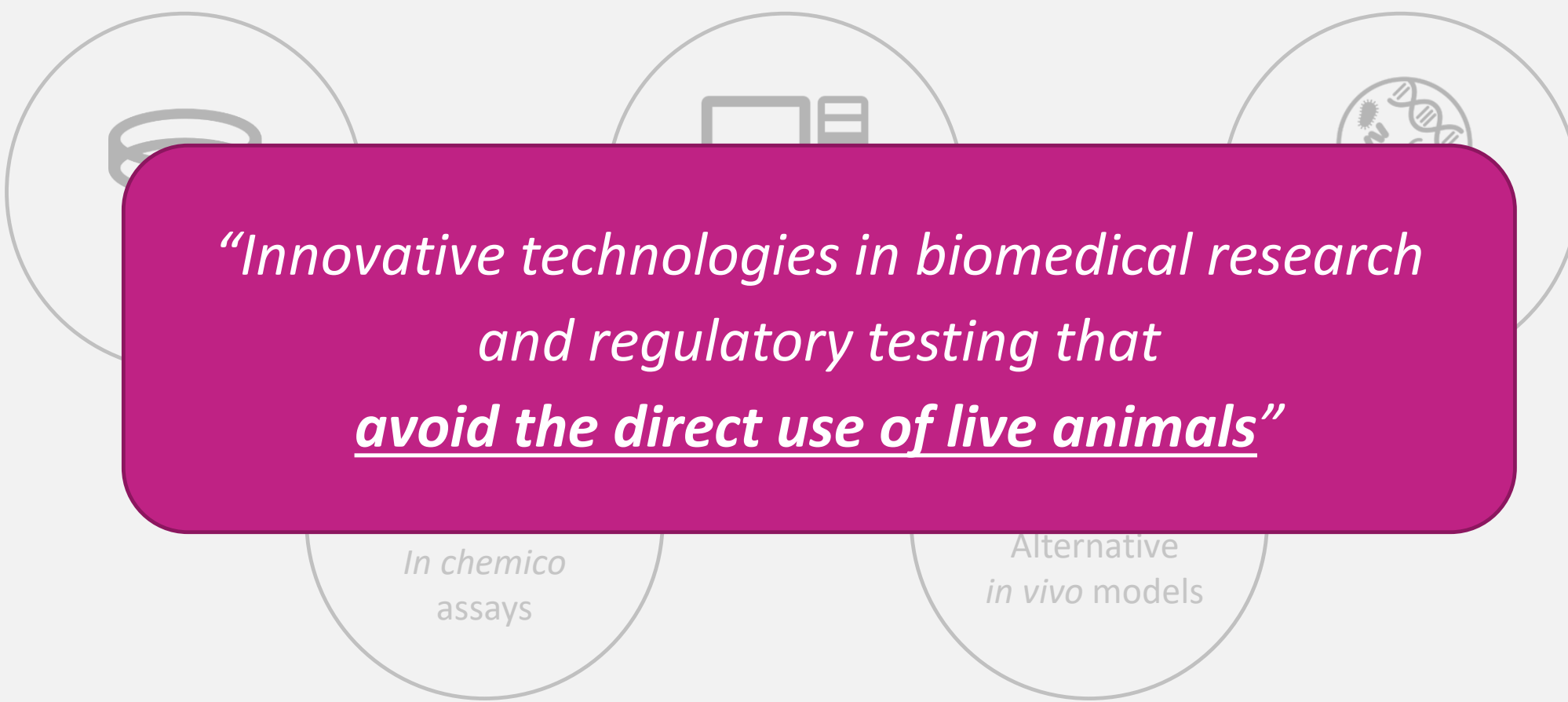


New Approach Methodologies (NAMs)



+ Many other innovative technologies!

New Approach Methodologies (NAMs)



*“Innovative technologies in biomedical research
and regulatory testing that
avoid the direct use of live animals”*

The diagram features three light gray circles in the background. The left circle contains an icon of a petri dish and is labeled 'In chemico assays'. The middle circle contains an icon of a computer monitor and is labeled 'Alternative in vivo models'. The right circle contains a DNA helix icon. A large magenta rounded rectangle is centered over the circles, containing the main text.

+ Many other innovative technologies!

Challenges related to the use of NAMs



Development and use of NAMs is continuously evolving,
Leading to a lack of standardization and validation



Limited to no regulatory framework available



Lack of trust & training in (data obtained via) new technologies

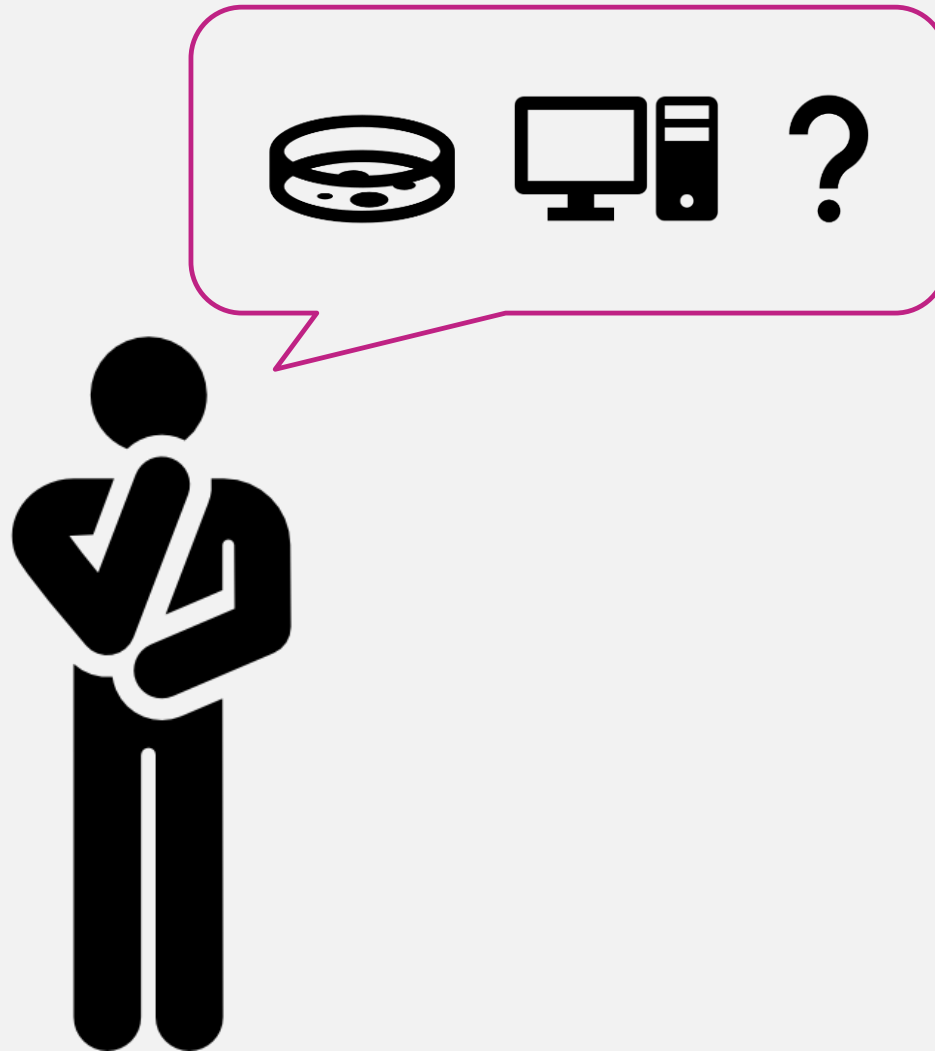


Difficult to find relevant, reliable and up-to-date information

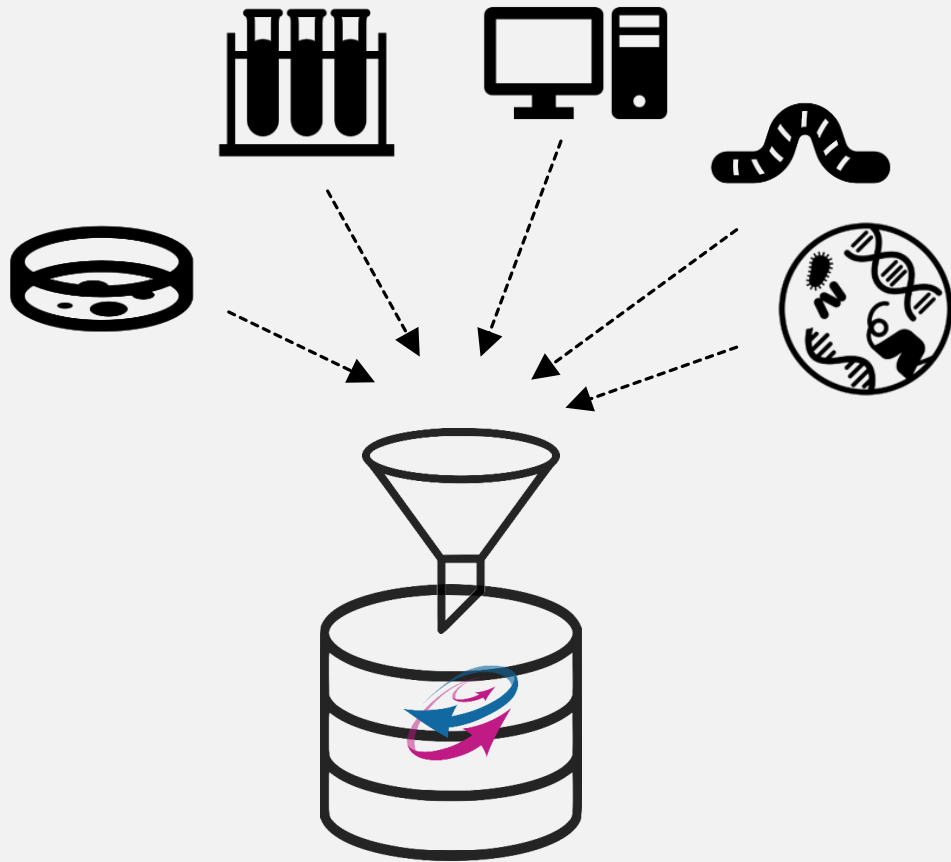


Need to centralize all available knowledge on alternatives

How far are we today?



Launch of the RE-Place project in Belgium



Collect the EXISTING EXPERTISE on
conventional alternative methods and NAMs
in Belgium in ONE CENTRAL DATABASE

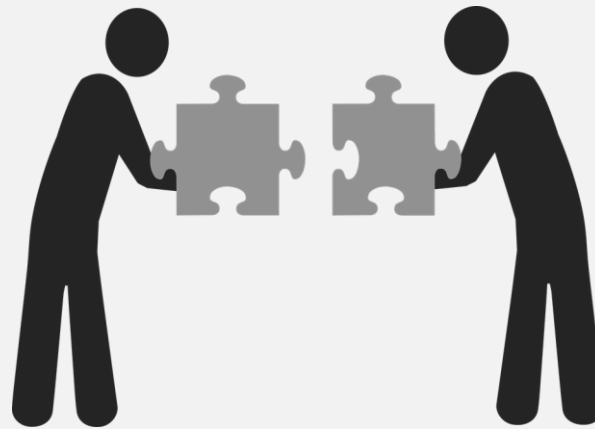
All methods in which one has EXPERIENCE

- ✓ Developed and/or used
- ✓ One single step or a whole (research) strategy

Financing of the RE-Place project

JOINT PROJECT

Departments of Animal Welfare



Vlaamse Overheid
Departement Omgeving (Weyts)



Leefmilieu Brussel
Kabinet Clerfayt, Formerly Debaets



Coordination of RE-Place project

➤ Sciensano

- Risk and Health Impact Assessment
- Dr. Birgit Mertens
- Mieke Van Mulders

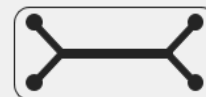
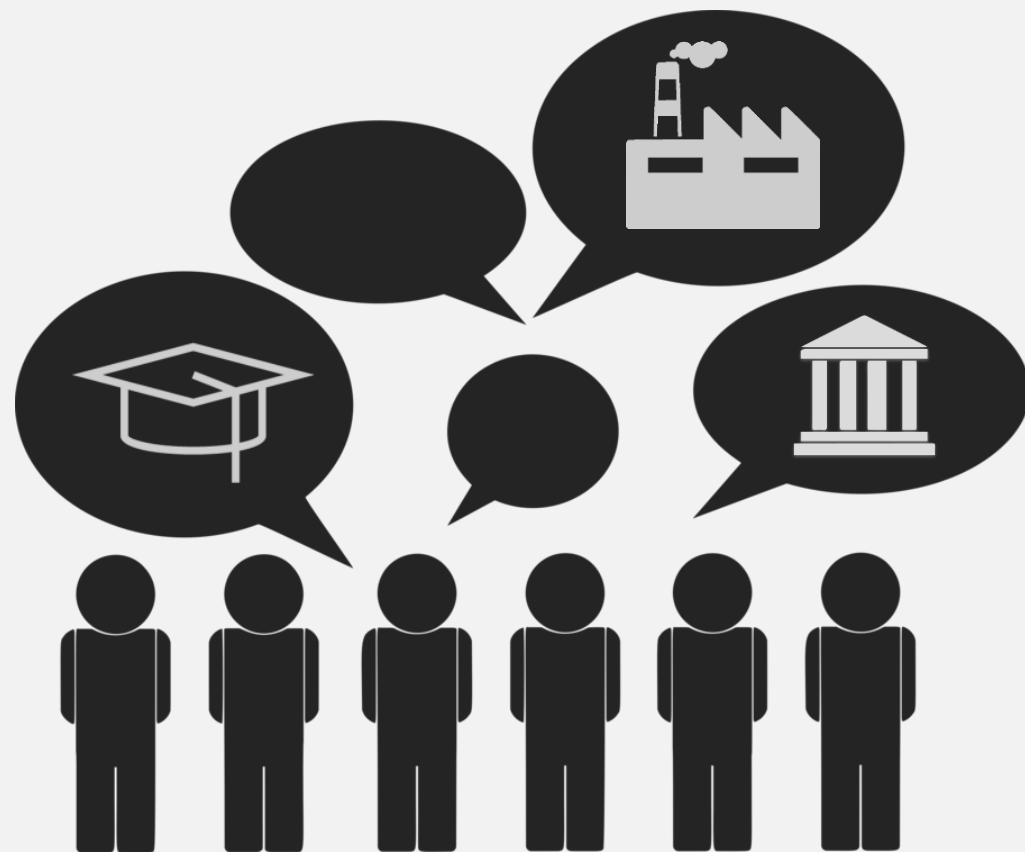


➤ Vrije Universiteit Brussel

- *In Vitro* Toxicology and Dermato-cosmetology
- Prof. Vera Rogiers
- Maude Everaert



RE-Place Steering Committee



Expertise in the field of NAMs



RE-Place

ALTERNATIVE METHODS TO
ANIMAL TESTING



History of the RE-Place project

2017

2018

2019

2020

2021

2022

Launch of the RE-Place project

**Wetenschappelijk medewerker - Platform alternatieve methoden
dierproeven (m/v)**

WETENSCHAPPELIJK INSTITUUT VOLKSGEZONDHEID - Brussels



DEPARTEMENT
OMGEVING



VRIJE
UNIVERSITEIT
BRUSSEL

2017

Kick-off Symposium

2018

2019

2020

2021

2022



2017

2018

2019

2020

2021

2022

RE-Place template

1. CONTACTGEGEVENS AUTEURS

ⓘ Deze informatie wordt niet zomaar vrijgegeven, maar is bedoeld voor ons persoonlijk gebruik. U kunt zelf aanduiden of uw naam en/of instituut verbonden mag worden aan uw methode (en dus weergegeven mag worden op onze website). Indien nodig, kunt u de onderstaande tabel uitbreiden met andere auteurs.

Contactgegevens	Te vervullen:	Contactgegevens	Te vervullen:
Naam auteur:		Naam co-auteur:	
Instituut auteur:		Instituut co-auteur:	
E-mail adres:		E-mail adres:	
Tel Nr.:		Tel Nr.:	
Bijkomende informatie:		Bijkomende informatie:	

	JA	NEEN
Mijn naam mag openbaar verbonden worden aan mijn methode:	☐	☐
Mijn instituut mag openbaar verbonden worden aan mijn methode:	☐	☐
De coördinatoren van het project mogen mij vragen doorsturen van personen die meer informatie wensen over mijn methode (<i>per mail</i>):	☐	☐
Deze informatie mag doorgestuurd worden naar DB-ALM * voor verdere review en eventuele validatie:	☐	☐

*DB-ALM is de databank op Europees niveau van het European Union Reference Laboratory for alternatives to animal testing ([EURL-ECVAM](#)).



Collaboration with Brussels Environment



Nancy Liodo Missigba

2017

2018

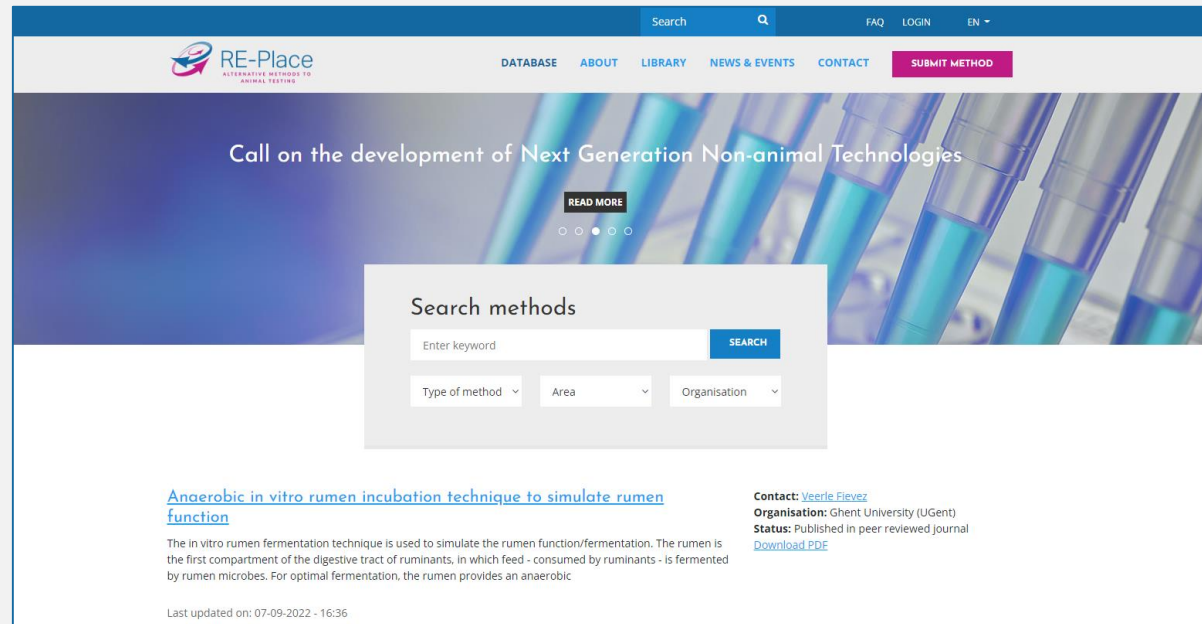
2019

2020

2021

2022

- Pilot Study with the template
- Development of the online tool
- Integration in the website





Promoting the project & collecting expertise

**KNOWLEDGE
FOR GROWTH**



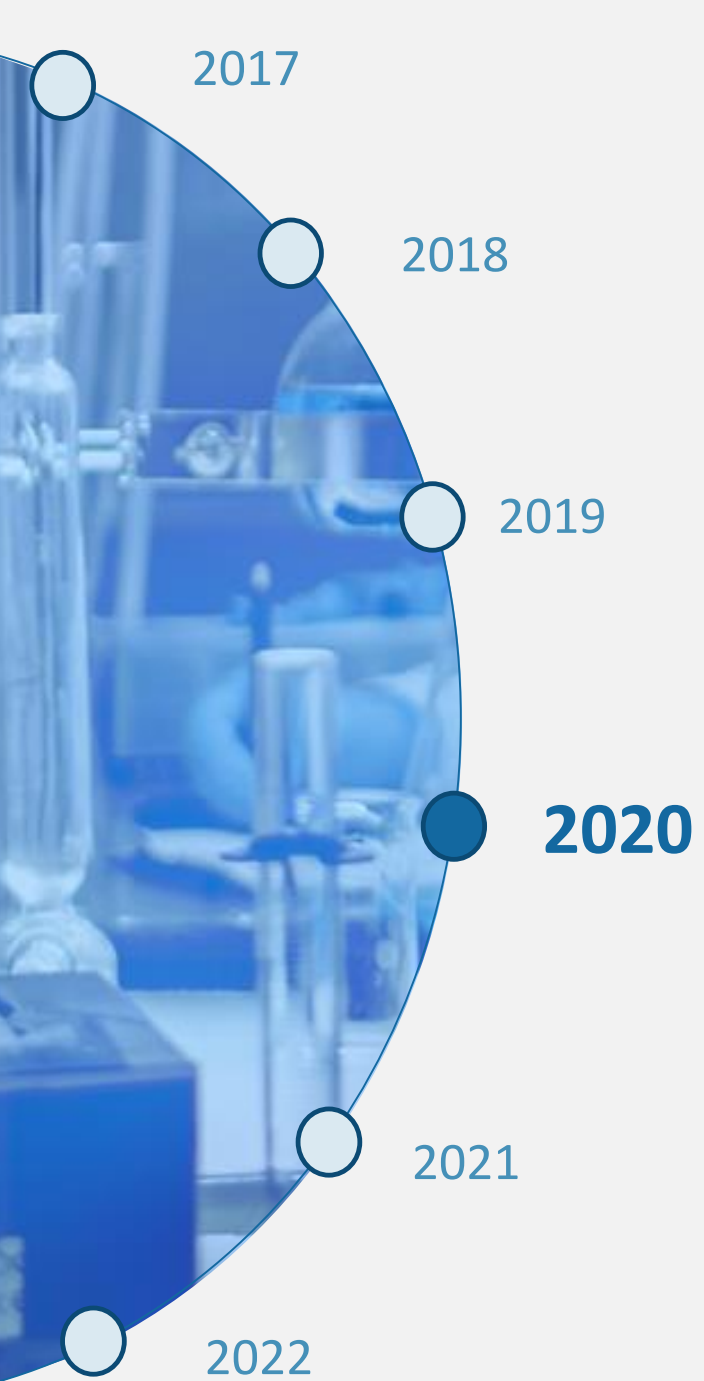
KATHOLIEKE UNIVERSITEIT
LEUVEN



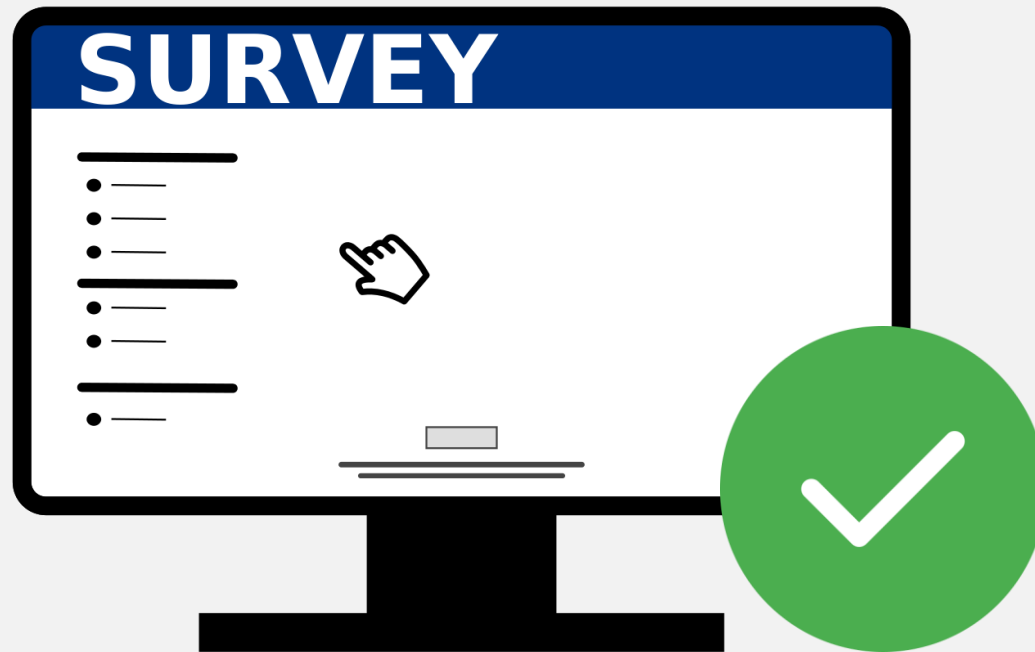
 **Universiteit
Antwerpen**



IC-3Rs
INNOVATION CENTRE
3R ALTERNATIVES



Survey on the use of the RE-Place platform



2017

2018

2019

2020

2021

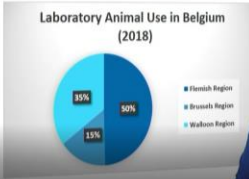
2022

Develop new promotional material

Context

- Belgium: yearly approx. 500 000 laboratory animals used
 - Flemish Region: $\pm$ 260 000
 - Brussels Region: $\pm$ 80 000
 - Walloon Region: $\pm$ 180 000

Laboratory Animal Use in Belgium (2018)



Region	Percentage
Flemish Region	85%
Brussels Region	15%
Walloon Region	0%

place intro-EN

19-02-2019 Saved as draft CONTINUE

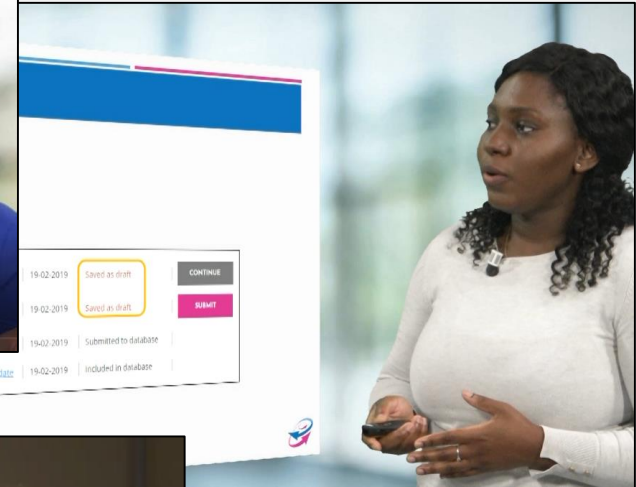
19-02-2019 Saved as draft SUBMIT

19-02-2019 Submitted to database

precursor cell isolation

Body on a chip

19-02-2019 Included in database



2017

2018

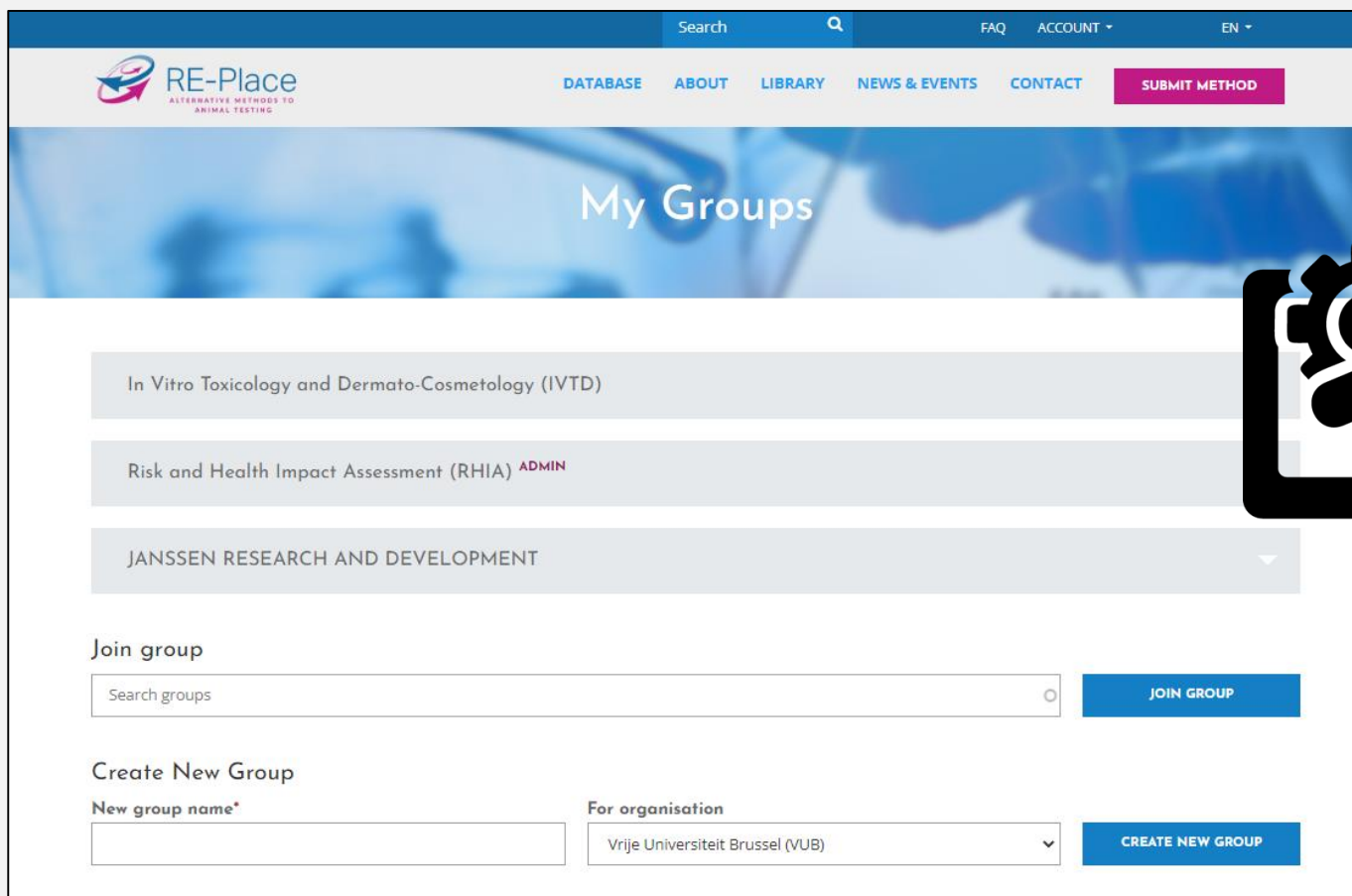
2019

2020

2021

2022

Launch of new features



Search

FAQ ACCOUNT EN

RE-Place
ALTERNATIVE METHODS TO
ANIMAL TESTING

DATABASE ABOUT LIBRARY NEWS & EVENTS CONTACT SUBMIT METHOD

My Groups

In Vitro Toxicology and Dermato-Cosmetology (IVTD)

Risk and Health Impact Assessment (RHIA) ADMIN

JANSSEN RESEARCH AND DEVELOPMENT

Join group

Search groups

JOIN GROUP

Create New Group

New group name*

For organisation

Vrije Universiteit Brussel (VUB)

CREATE NEW GROUP

2017

2018

2019

2020

2021

2022

Press release

Letter of the minister



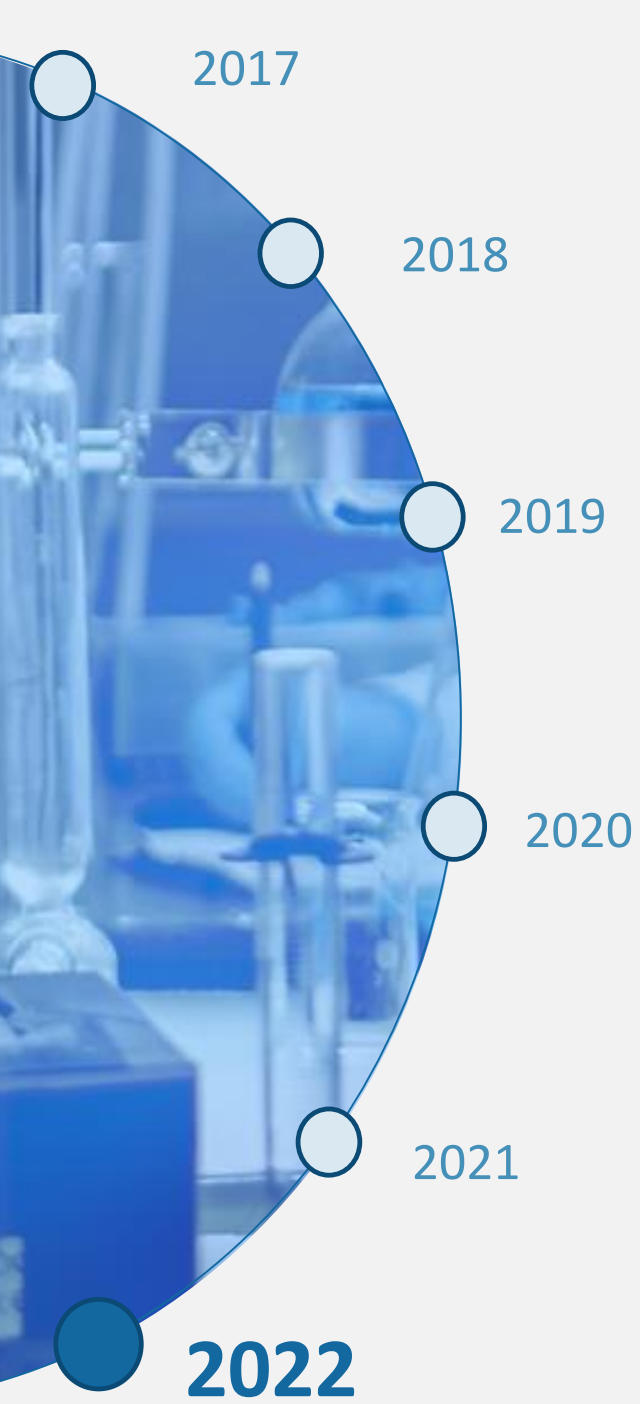
Het RE-Place project focust op het bevorderen van alternatieve methoden die dierproeven kunnen helpen vervangen

Brussel, 16 januari 2022
Nieuwste versie van het RE-Place
repertorium van alternatieve
methoden voor dierproeven
nu mogelijk is met dergelijke

170 méthodes alternatives à l'expérimentation animale déjà répertoriées par RE-Place

Actualité - Dimanche 16 janvier 2022





New scientific collaborator for the Brussels region



Maude Everaert



Expanding the scientific impact

RE-Place: A Unique Project Collecting
Expertise on New Approach Methodologies

 Frontiers in Pharmacology
Published on 22 Jun 2022

> 50 meetings



3 international presentations

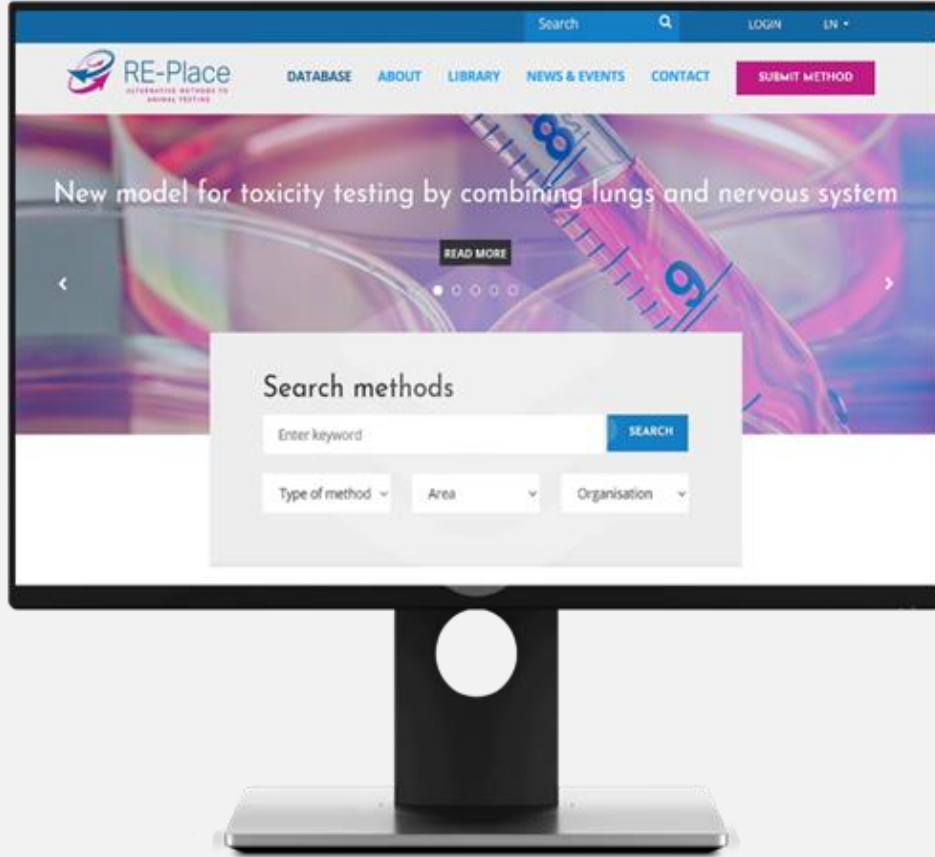


RE-Place

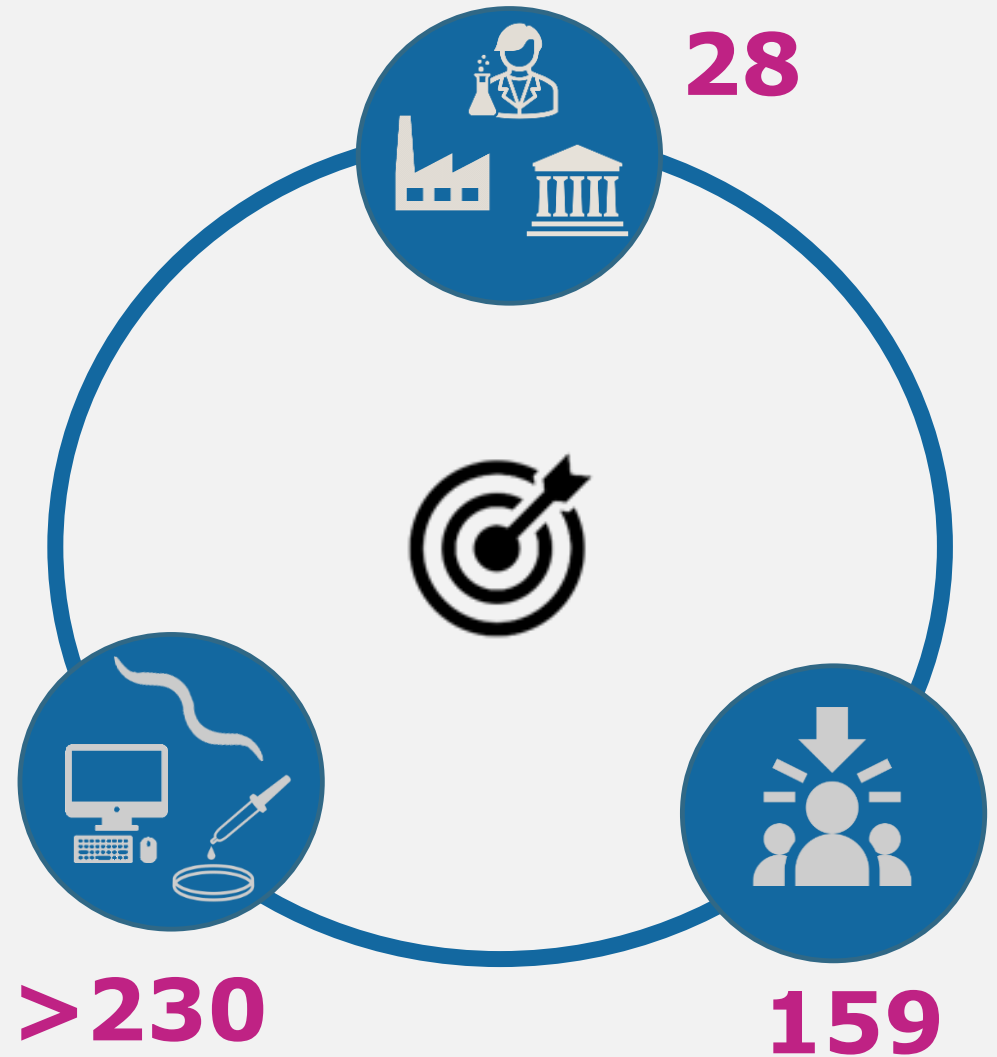
ALTERNATIVE METHODS TO
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Current status

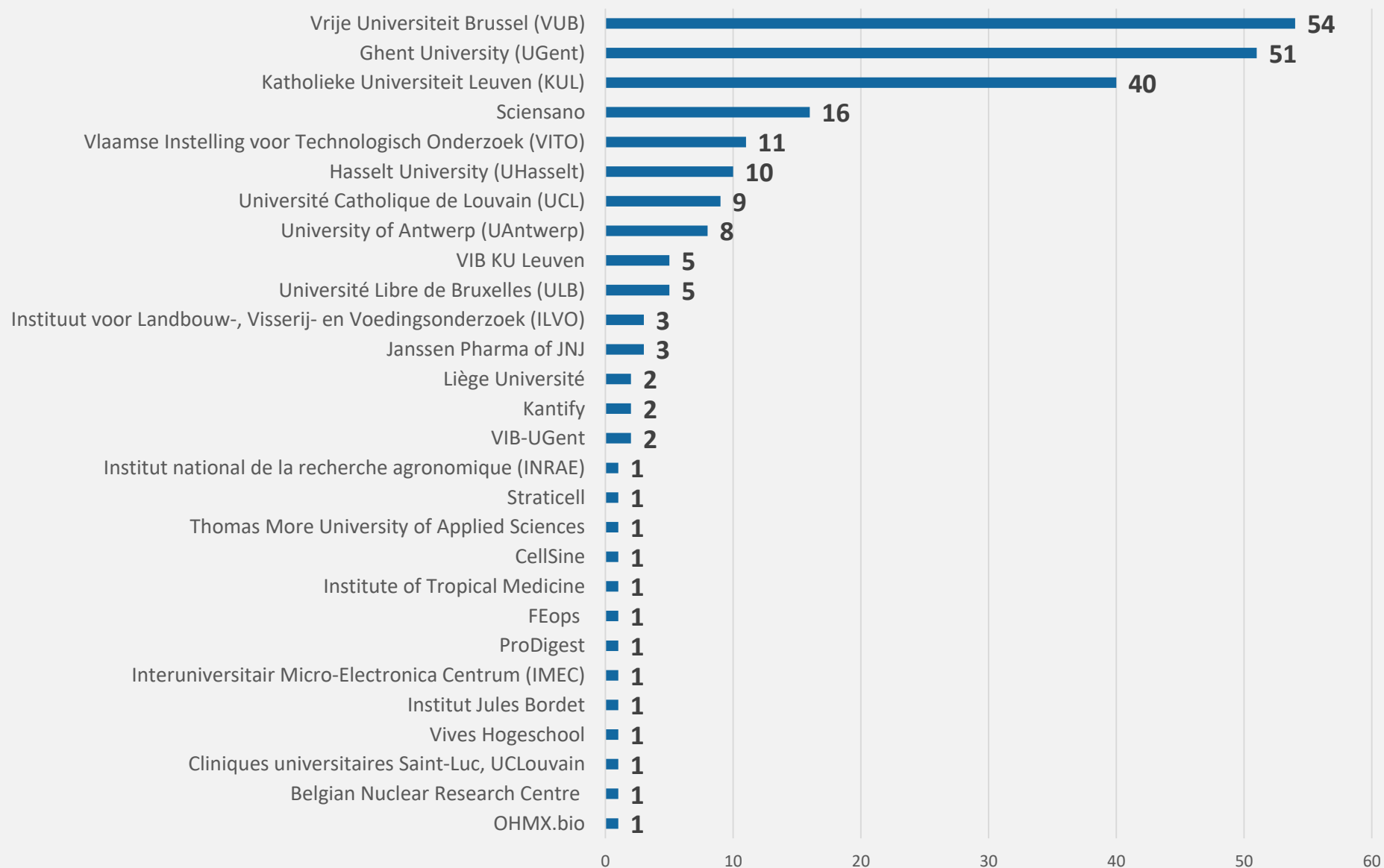
Current status of the RE-Place database



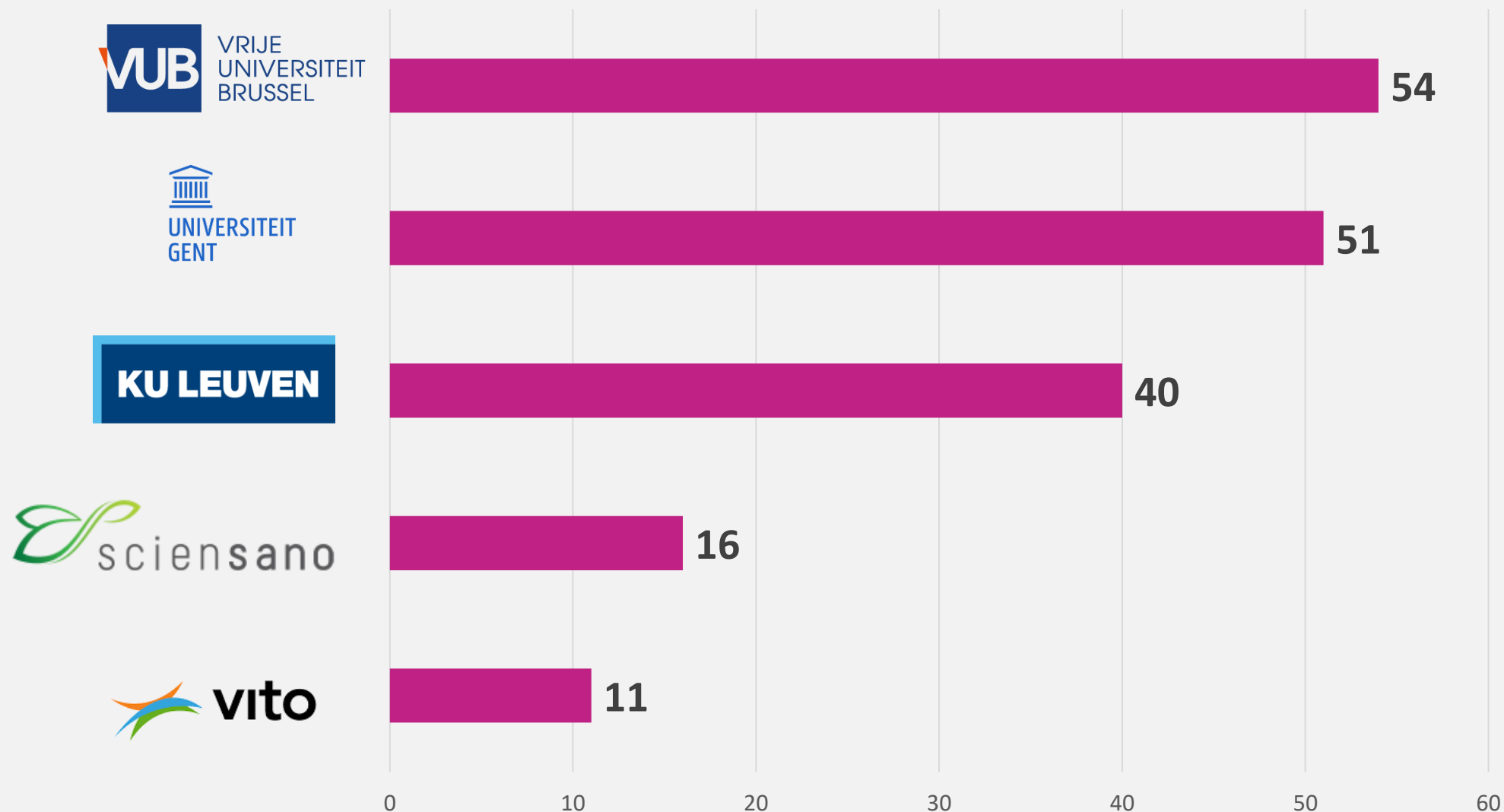
www.RE-Place.be



Current status of the RE-Place database: 27 organisations



Current status of the RE-Place database: top 5 organisations





RE-Place

ALTERNATIVE METHODS TO
ANIMAL TESTING

The background of the slide is a photograph of laboratory glassware, including several Erlenmeyer flasks and a graduated cylinder, all containing a pink liquid. The image is overlaid with a semi-transparent purple and pink filter.

Future prospects

Continue our activities



Promote existing knowledge

ALTERNATIVE project builds platform for detecting the cardiotoxicity of chemicals

Posted on: 27/06/2022

[Generation of monocytes-derived dendritic cells from chicken blood for in vitro studies](#)

The purpose of the present development is to use avian MoDCs to implement a cellular platform to increase understanding of the immune responses induced by various antigens of interest (e.g. vaccine candidates) and evaluate their immunogenic potential. Considering the difficulty to work on dendritic

Last updated on: 17-05-2022 - 17:00

Contact: [Fiona Ingraio](#)
Organisation: Sciensano
Status: Still in development
[Download PDF](#)

[Activity study of possible endocrine disruption via receptors by using CALUX cell systems](#)

The CALUX® system (Chemically Activated Luciferase eXpression) of Bio Det Netherlands) uses U-2 OS cells (human osteoblast) that are stably transfected with PPARγ2 (BDS, Amsterdam) and a luciferase reporter construct under the control of

Last updated on: 05-05-2022 - 08:59

Events

30/06/2022

2022 VIRTUAL 3D CELL CULTURE SUMMIT

Virtual Seminar

[Read more](#)

30/06/2022

ALTERNATIVES IN ANTIBODY PRODUCTION

Webinar

[Read more](#)



RE-Place, open access database collecting NAMs
@REPLACEdatabase

🙏 Thank you [@DittlauKatarina](#) from [@KU_Leuven](#) for submitting your expertise on the generation of human [#motorunits](#) with functional [#neuromuscular](#) junctions in [#microfluidicdevices](#) to the RE-Place database!

Don't hesitate to have a look at her video 📺



jove.com

Generation of Human Motor Units with Functional Neuro...
Scientific Video Article | We describe a method to generate human motor units in commercially available microfluidic ...

2:54 PM · Jan 12, 2023 · 714 Views

Upcoming events

2023



Study days



Educational webinars

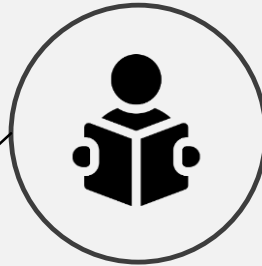
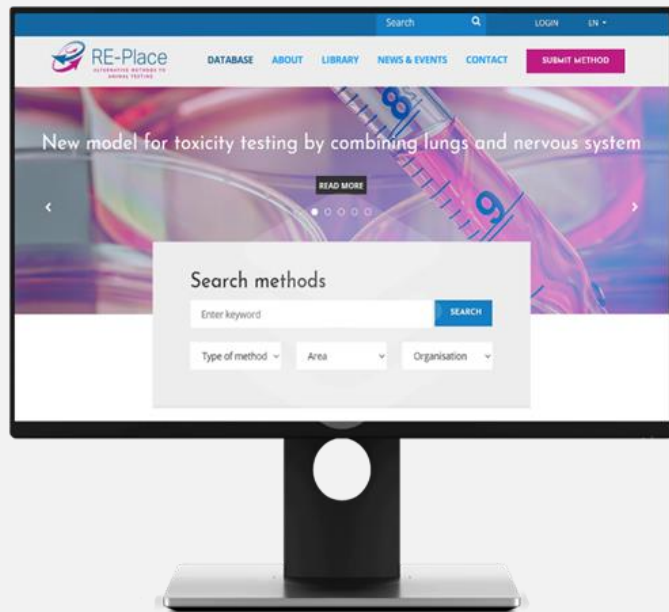


Joint symposium

Contact us via info@RE-Place.be

Register via www.RE-Place.be

RE-Place: knowledge sharing platform on NAMs



[Learn more](#)



[Promote existing expertise](#)